

MARYLAND BIRDLIFE

Bulletin of the Maryland Ornithological Society, Inc.

Cylburn Mansion, 4915 Greenspring Ave., Baltimore 9, Md.



Volume 21

SEPTEMBER 1965

Number 3

The Maryland Ornithological Society, Inc.
Cylburn Mansion, 4915 Greenspring Ave., Baltimore, Maryland 21209

State Officers

President: Mr. V. Edwin Unger, West Central Ave., Federalsburg 21632 754-2291
First V.P.: Mrs. Richard D. Cole, 625 Valley Lane, Towson 21204 VA3-2650
Second V.P.: Dr. W. Rowland Taylor, 1540 Northbourne Rd., Baltimore 21212 ID3-1803
Treasurer: Dr. Turner L. Smith, R. D. 2, Box 224, Chestertown 21620 778-3691
Rec. Sec'y: Mrs. Katherine B. Bauer, Box 151, Royal Oak 21662 RI5-2731
Exec. Sec'y: Miss Mildred F. Cole, 4201 Belmar Ave., Baltimore 21206 HA6-0190

Executive Council

Mr. David Bridge, 12A Plateau Place, Greenbelt 20770 474-1463
Mrs. Edwin C. Gras, 125 Academy St., Annapolis 21401 CO3-4708
Mrs. Edward Mendinhal, R. D. 2, Chestertown 21620 778-0826
Mr. Robert L. Pyle, 3012 44th St. N.W., Washington, D.C. 20016 WO6-8515
Mr. Chandler S. Robbins, Patuxent Wildlife Research Center, Laurel 20810 776-6760
Mr. Robert Sharp II, R. F. D. 1, Easton 21601 TA2-2324
Mrs. C. Gordon Taylor, 75 Broadway, Frostburg 21532 OV9-6791

State Trustees

Allegany:	*Mr. Joseph Minke Harford:	*Mrs. Grace H. Wright
	Mrs. C. Gordon Taylor	Miss Estella Everett
Anne Arundel:	*Mrs. Edwin C. Gras Kent:	*Mrs. Edward Mendinhal
	Miss Reida Longanecker	Mrs. Turner L. Smith
Baltimore:	*Dr. W. Rowland Taylor Montgomery:	*Mr. Carl W. Carlson
	Mr. Compton Crook	Mr. Robert L. Pyle
	Mrs. Robert E. Kaestner Patuxent:	*Mr. Morris R. Collins
	Mr. Chandler S. Robbins	Mr. David Bridge
	Mr. Irving E. Hampe Soldiers	*Dr. Elmer G. Worthley
Caroline:	*Mr. E. Aldridge Pepper Delight:	Mrs. Bertha Poe
	Mrs. E. A. Pepper Talbot:	*Mr. Robert Sharp II
Frederick:	*Mrs. Bertram Haines	Mr. Richard L. Kleen
	Dr. Howard Hodge	Miss Edith Adkins

*Chapter President

Active Membership (adults)	\$ 2.00 plus local chapter dues
Junior Membership (under 18 years)	.50 plus local chapter dues
Family Membership (Mr. & Mrs.)	3.00 plus local chapter dues
Sustaining Membership	5.00 plus local chapter dues
Life Membership	100.00 (payable in 4 annual installments)
Out-of-State Membership	\$2.00 (<u>Maryland Birdlife</u> only)

Cover: Adult Male Bay-breasted Warbler
Photograph by Anderson J. Martin
Headings: Irving E. Hampe, Art Editor
Nature Camp photos by Anderson J. Martin



MARYLAND BIRDLIFE

*Published quarterly by the
Maryland Ornithological Society, Inc.
Cyburn Mansion, 4915 Greenspring Ave., Baltimore 9, Md.*

Volume 21

SEPTEMBER 1965

Number 3

REPORT OF STATE-WIDE BIRD COUNT, MAY 1, 1965

Vernon M. Kleen

The eighteenth annual May Count was rewarding in some respects and disappointing in others. Many winter holdovers remained through the 1st, and the extremely warm night of April 30—May 1 brought in many migrant species, especially many of the warblers. We were disappointed that several of our regular participants were unable to help this year and that there was only one small party of 3 observers in the whole Ocean City area for less than 4 hours. The 233 observers spent a total of 684 party-hours in the field this year. Both of these figures are records for the count.

The weather during the last week of April just prior to the May Count was rather cool with some rain falling in the early part of the week. The night of April 30—May 1 was extremely warm and clear and migrants could easily be heard during the early hours of the morning by those who were out listening for owls and goatsuckers. Throughout the day the temperature ranged from the low 50's in the morning up to highs of 65° in the western part of the State and 80° in the eastern part. There was little wind, but scattered showers interrupted the day at various times. The rain did not continue long in any area and thereby did not discourage the counters.

Using the same species as last year, the counts of winter residents and nocturnal species are compared to those of previous years as follows:

	Winter Residents					Nocturnal Species			
	1962	1963	1964	1965		1962	1963	1964	1965
Canada Goose	87	106	176	123	Screech Owl	13	13	5	2
Yel-bel Sapsucker	5	6	6	21	Barred Owl	28	25	19	29
Brown Creeper	2	4	6	10	Chuck-w-widow	126	56	6	62
Rusty Blackbird	0	7	18	211	Whip-poor-will	133	81	36	115
Slate-col. Junco	6	78	77	145					
White-thr Sparrow	568	962	1150	3784					

From the comparisons on page 59, the strong holdover of many winter birds is readily seen. Some of the figures indicate the highest number ever recorded on a May Count. The nocturnal species also show a general increase after a constant decrease over the past two years; part of the success resulted from the calm night and part from having more observers afield in the early morning hours.

Observers participated in 19 of the 23 counties in the State this year. Total species recorded in each county are shown on Map 1. A total of 227 species (only 5 short of the record back in 1963) and 97,886 individuals (a new high) were reported. Only 6 species were reported on every list, and 10 more were recorded on all but one list. In contrast, 35 species were found by only one party and an additional 15 by only two parties.

A very high total of 9 lists contained more than 100 species. Many of the county lists, though, contain a combined total of several small parties which help them reach their high totals. The highest county was Anne Arundel with 149 species, but the highest list was that of 148 species, including the rare spring migrant Orange-crowned Warbler, reported by Montgomery County. Kent County with its 146 species recorded the tremendously high total of 25,256 individuals; this total is nearly half as much as our past year's grand total of individuals. The most common bird this year was the Canada Goose with 12,314 (8,138 from Kent County). If Kent County had not found so many geese, the Common Grackle would have been the high species again with 9,822. Species missed this year that are normally seen include Cattle Egret, Louisiana Heron, Glossy Ibis, Swainson's Warbler, and Sharp-tailed Sparrow. This shows the importance of strong coverage in the Ocean City area.

Map 2 shows the number of party-hours for each county. It can be used to correlate the number of hours in the field in comparison to the number of migrant individuals per species recorded in various counties. Map 3 shows the number of Ruby-throated Hummingbirds recorded in each county as well as the number of party-hours that were required, on the average, to find each bird. Map 4 gives the same information for the Great Crested Flycatcher, Map 5 for the House Wren, Map 6 for the Red-eyed Vireo, Map 7 for the Yellow Warbler, and Map 8 for the Baltimore Oriole.

The value of the State-wide Bird Count as an index of population changes over the years depends largely upon consistency of coverage from year to year. We wish to thank everyone who participated and to urge each of you to plan to cover your same area again next year. In order that more thorough coverage can be made next year and in years to follow, we hope to know ahead of time which places are going to be covered; by planning far enough in advance we should be able to have all 23 counties included. Look for a notice of the 1966 State-wide Bird Count in the March 1966 issue of Maryland Birdlife.

STATE-WIDE BIRD COUNT

Species	Ger	All	Was	NFr	SFr	Cr1	How	Mon	Har	Bal	LFr	PRC	BRC	PrG	Ode	Gib	SAA	Ann	Cal	Cha	StM	Ken	Car	Tal	Dor	Wor	Total
Common Loon	-	1	-	-	-	-	12	3	-	1	-	1	-	1	9	1	6	10	-	-	39	20	-	23	-	-	127
Horned Grebe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	7	4	-	-	-	9	5	-	1	-	5	51
Pied-billed Grebe	2	-	-	-	-	-	-	-	2	1	-	6	-	-	-	-	1	-	1	-	-	9	-	-	-	-	22
Double-cr. Cormorant	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	2	6	4	-	-	61	74
Great Blue Heron	-	-	-	-	1	-	-	6	1	-	1	3	-	-	-	6	29	2	4	-	500	50	5	12	1	6	627
Green Heron	-	-	-	1	2	1	-	5	1	2	2	2	-	1	1	6	3	2	-	-	6	21	3	52	-	1	112
Little Blue Heron	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	11	-	-	-	-	-	12
Common Egret	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	400	-	-	6	-	-	409
Snowy Egret	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	1	-	-	-	5	10
Black-cr. Night Heron	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	1	2	-	8
Yellow-cr. Night Heron	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Least Bittern	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1
American Bittern	-	-	-	-	-	-	-	3	-	1	1	2	-	-	2	-	-	-	-	-	-	1	-	-	-	-	10
Whistling Swan	-	-	-	-	-	-	-	4	-	-	1	-	-	-	1	8	9	-	-	-	-	12	3	12	-	-	54
Canada Goose	-	-	-	-	-	-	-	2702	1	-	-	4	-	-	-	1	157	-	-	-	-	8138	11	1300	-	-	12314
Mallard	-	-	5	1	2	2	2	28	-	5	4	10	2	-	-	6	2	8	11	-	-	932	6	75	5	12	1118
Black Duck	-	2	-	-	-	-	-	-	1	-	1	9	-	-	-	2	10	4	2	-	6	148	7	7	6	2	207
Gadwall	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33	-	-	-	-	-	33
Pintail	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	23	-	-	-	-	-	24
Green-winged Teal	-	-	-	-	-	-	-	10	-	-	4	-	-	-	-	5	-	-	-	-	-	19	-	30	-	-	68
Blue-winged Teal	-	-	-	-	11	3	-	36	-	-	6	5	-	-	-	-	-	-	-	-	-	29	2	2	-	-	94
American Widgeon	-	-	-	-	-	-	-	43	-	-	10	-	-	-	-	1	-	-	-	-	-	69	-	-	2	-	125
Shoveler	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	15	-	-	-	-	-	16
Wood Duck	-	2	2	6	12	-	-	45	9	2	1	20	-	-	-	-	4	1	-	-	31	5	-	-	-	-	140
Redhead	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	8	-	-	-	-	-	9
Ring-necked Duck	-	-	-	-	-	-	-	8	-	-	-	1	-	-	-	-	-	-	-	-	14	-	-	-	-	-	23
Canvasback	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	9	-	-	-	4	67	-	2	-	-	85
Greater Scaup Duck	25	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	134	-	2	-	-	-	166
Lesser Scaup Duck	-	-	-	-	-	1	-	36	-	5	-	-	-	-	-	100	355	109	-	-	66	23	-	75	-	-	770
Common Goldeneye	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1
Bufflehead	-	-	2	-	-	-	2	-	-	-	-	-	-	-	-	125	7	1	-	-	19	16	-	9	-	-	181
Oldsquaw	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	40	-	-	-	-	44
Surf Scoter	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
White-winged Scoter	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	69	-	-	-	-	-	69
Ruddy Duck	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	250	50	15	-	-	109	247	-	40	-	-	712
Hooded Merganser	-	-	-	-	-	-	-	2	-	-	-	-	1	-	-	-	20	-	-	-	-	2	-	-	-	-	25
Common Merganser	2	14	12	-	1	2	-	1	-	7	-	-	-	-	-	28	40	-	2	-	-	-	-	-	-	-	109
Red-breasted Merganser	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	7	-	-	-	37	45
Turkey Vulture	-	8	6	9	12	2	16	44	11	12	11	5	3	1	1	2	14	21	20	3	21	113	161	72	2	-	570
Black Vulture	-	-	1	-	-	-	-	-	-	2	1	2	-	-	-	1	-	-	-	-	1	4	5	2	-	-	18
Sharp-shinned Hawk	-	-	-	-	-	-	-	1	1	1	-	-	-	1	-	-	-	2	-	-	1	2	-	-	-	-	9
Cooper's Hawk	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	1	-	1	-	-	-	4
Red-tailed Hawk	-	-	-	-	-	-	1	2	-	1	-	2	-	-	-	-	-	1	-	-	2	6	2	2	-	-	19
Red-shouldered Hawk	-	-	-	-	-	2	-	1	-	-	-	3	-	3	3	-	-	1	3	1	1	-	2	-	-	-	20
Broad-winged Hawk	2	1	2	2	-	1	-	3	1	5	4	-	-	-	2	-	-	-	1	-	1	-	-	-	-	-	25

September 1965

MARYLAND BIRDLIFE

61

Species	Gar	All	Was	NFr	SFr	Cr1	How	Mon	Har	Bal	Lra	PRC	BRC	PrG	Ode	G1b	SAA	Ann	Cal	Cha	StM	Ken	Car	Tal	Dor	Wor	Total
Bald Eagle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	4	-	-	-	-	7
Marsh Hawk	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	1	3	-	1	-	-	6	
Osprey	-	-	-	2	2	2	-	2	3	1	1	1	-	-	-	1	9	2	7	-	57	39	4	240	-	1	374
Peregrine Falcon	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	
Pigeon Hawk	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Sparrow Hawk	1	-	-	-	-	-	3	2	-	1	-	1	-	-	1	4	2	1	4	-	-	5	2	1	-	28	
Ruffed Grouse	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	
Bobwhite	-	14	5	12	10	3	31	55	4	8	4	6	3	16	4	12	16	94	24	-	53	244	88	42	5	757	
Ring-necked Pheasant	1	-	-	3	-	1	4	-	-	2	3	-	-	-	-	-	-	-	-	-	-	4	-	-	-	18	
Turkey	-	-	2	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	
King Rail	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	
Clapper Rail	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	
Virginia Rail	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	5	
Common Gallinule	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	
American Coot	-	-	-	-	-	-	-	22	75	1	-	9	-	-	-	-	-	-	-	-	-	549	-	-	-	656	
American Oystercatcher	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	5	
Semipalmated Plover	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	1	-	-	18	23	
Piping Plover	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	5	
Killdeer	-	2	-	5	3	-	1	8	2	1	8	-	-	5	-	1	3	-	1	5	6	19	19	2	-	92	
Black-bellied Plover	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60	60	
Ruddy Turnstone	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	17	
American Woodcock	-	-	-	-	-	-	7	3	-	1	3	1	-	7	4	-	2	1	-	-	5	-	6	-	2	42	
Common Snipe	-	-	-	-	6	1	-	1	-	15	1	-	-	-	-	2	-	-	-	-	3	8	11	3	-	51	
Upland Plover	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Spotted Sandpiper	2	-	1	10	4	10	2	9	-	5	13	1	-	-	-	4	4	-	3	-	-	4	9	2	-	83	
Solitary Sandpiper	-	-	-	3	3	-	-	3	-	-	-	-	-	-	-	-	-	1	-	-	-	2	1	1	-	14	
Willet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	51	57	
Greater Yellowlegs	-	-	-	2	3	-	-	4	-	-	4	-	-	-	-	-	2	1	1	-	2	57	4	4	-	87	
Lesser Yellowlegs	1	-	-	8	9	-	-	2	-	-	11	-	-	-	-	1	-	-	-	-	-	11	1	-	-	44	
Knot	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	
Purple Sandpiper	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	120	120	
Pectoral Sandpiper	-	-	-	-	3	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	
Least Sandpiper	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	2	6	-	20	
Dunlin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	650	651	
Short-billed Dowitcher	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30	30	
Semipalmated Sandpiper	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	-	1	-	48	
Sanderling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	227	227	
Great Black-back Gull	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	1	-	6	-	-	33	-	1	-	85	
Herring Gull	-	-	-	-	-	-	1	2	195	8	1	-	-	-	-	47	7	30	14	-	79	457	75	4	-	1324	
Ring-billed Gull	-	6	-	-	-	-	127	249	41	-	107	-	-	-	-	16	1	-	28	-	1000	1149	64	250	-	3038	
Laughing Gull	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	42	-	600	-	131	200	-	1007	
Bonaparte's Gull	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	6	30	-	-	-	-	1	-	-	-	42	
Forster's Tern	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	2	
Common Tern	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	7	-	-	6	-	150	-	130	298	
Least Tern	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14	-	-	1	-	-	-	4	19	
Royal Tern	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	
Caspian Tern	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	

Species	Gar	All	Was	NFr	SFr	Cr1	How	Mon	Har	Bel	LRa	PRC	BRC	PrG	Ode	Gdb	SAA	Ann	Cal	Cha	StM	Ken	Car	Tal	Dor	Wor	Total
Black Tern	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1
Black Skimmer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28	28
Mourning Dove	3	8	9	26	14	4	117	93	18	27	4	8	11	22	50	31	22	36	103	25	96	191	77	20	1	-	1016
Yellow-billed Cuckoo	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	2	1	-	1	-	-	-	-	7
Black-billed Cuckoo	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	2
Barn Owl	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14	-	-	14
Screech Owl	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	2
Great Horned Owl	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	1	-	-	4
Barred Owl	-	-	-	-	-	-	3	10	-	2	-	2	-	-	2	-	1	-	-	-	4	1	4	-	-	-	29
Long-eared Owl	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Short-eared Owl	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	2
Chuck-will's-widow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	56	-	2	2	-	-	60
Whip-poor-will	-	-	-	-	-	-	17	5	-	2	-	1	-	1	10	4	3	-	-	-	42	1	29	-	-	-	115
Common Nighthawk	-	4	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	8
Chimney Swift	7	17	111	40	12	30	35	106	344	62	6	15	7	47	5	80	13	3	58	-	11	50	158	65	-	5	1287
Ruby-thr. Hummingbird	-	1	-	1	1	-	1	5	4	2	-	1	-	1	1	6	3	4	11	-	8	5	11	2	-	-	68
Belted Kingfisher	1	2	3	1	-	2	2	7	2	5	2	1	-	1	2	9	9	4	1	2	5	28	6	4	-	1	100
Yellow-shafted Flicker	12	21	12	19	5	3	37	58	22	30	9	6	7	15	20	56	13	51	6	-	16	163	32	10	-	-	623
Pileated Woodpecker	-	6	-	1	2	-	-	11	-	-	-	1	-	-	-	-	-	-	-	1	1	-	3	-	-	-	26
Red-bellied Woodpecker	-	-	2	15	4	3	40	87	2	9	1	21	7	14	16	28	18	21	24	-	15	93	36	9	-	-	465
Red-headed Woodpecker	-	-	-	2	-	-	-	1	-	1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
Yellow-bellied Sapsucker	-	2	-	2	-	1	1	4	1	1	-	1	-	1	-	2	-	1	1	-	-	1	2	-	-	-	21
Hairy Woodpecker	4	3	-	2	-	-	7	7	3	1	1	-	-	2	3	1	-	4	-	-	2	10	8	2	-	-	60
Downy Woodpecker	1	7	8	10	3	1	33	76	6	20	3	15	5	15	18	27	13	18	7	3	10	43	26	4	-	-	372
Eastern Kingbird	1	4	3	1	7	3	11	38	1	3	1	8	2	3	2	14	3	3	10	-	11	38	30	4	1	-	202
Gt. Crested Flycatcher	-	1	1	4	-	-	2	6	-	4	-	2	-	3	6	1	4	-	-	5	12	46	24	4	-	-	125
Eastern Phoebe	4	9	5	9	1	10	26	6	13	7	4	5	1	5	-	1	9	6	9	5	12	38	2	-	-	-	188
Acadian Flycatcher	-	-	-	-	-	-	1	3	1	-	-	-	-	-	1	1	-	-	8	2	2	-	10	-	-	-	29
Traill's Flycatcher	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Least Flycatcher	30	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	31
Eastern Wood Pewee	-	-	-	-	-	-	-	-	1	-	-	-	-	2	-	-	-	-	-	-	-	1	9	-	-	-	13
Horned Lark	2	2	1	-	7	-	5	18	1	1	-	-	-	-	-	-	-	-	2	-	2	7	17	4	-	3	73
Tree Swallow	8	-	-	1	8	40	-	24	5	31	16	20	-	1	-	202	100	5	10	12	61	149	45	78	60	-	875
Bank Swallow	-	-	-	-	-	-	-	-	-	-	-	4	-	-	-	-	-	1	3	13	34	105	8	-	-	-	479
Rough-winged Swallow	-	10	6	3	5	-	3	13	-	30	-	4	-	-	-	79	1	-	5	3	5	2	6	3	-	-	178
Barn Swallow	6	15	55	25	13	60	76	138	39	41	115	13	12	59	7	55	10	59	70	8	428	399	206	75	5	31	2020
Cliff Swallow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	2
Purple Martin	100	74	27	28	10	2	8	39	11	4	10	10	-	55	10	30	1	12	10	-	42	127	107	60	-	3	780
Blue Jay	6	7	12	44	24	5	106	280	91	92	4	60	29	187	80	200	145	220	150	75	32	306	107	14	-	-	4076
Common Crow	5	12	20	68	25	10	52	160	27	47	24	13	22	22	21	56	7	29	79	10	77	317	69	100	-	-	1274
Fish Crow	-	-	-	-	-	2	1	5	11	7	-	2	2	-	4	4	4	2	14	19	40	28	5	20	-	-	170
Black-capped Chickadee	8	4	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14
Carolina Chickadee	-	-	12	19	12	5	42	117	24	20	13	19	15	26	45	63	32	27	35	13	24	151	83	20	-	-	807
Tufted Titmouse	4	8	6	25	10	5	40	146	27	18	2	21	22	35	25	66	11	32	30	5	21	153	81	12	1	-	806
White-br. Nuthatch	1	7	2	-	-	2	2	11	1	10	1	2	2	-	-	-	1	-	-	-	-	-	-	-	-	-	40
Brown-headed Nuthatch	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	4	-	-	8
Brown Creeper	-	2	-	-	1	-	-	1	-	2	-	1	-	1	-	-	-	-	-	-	-	2	-	-	-	-	10

Species	Car	All	Was	NFr	SFr	Cr1	How	Mon	Har	Bal	Lra	PRC	BRC	PrG	Ode	Gib	SAA	Ann	Cal	Cha	StM	Ken	Car	Tal	Dor	Wor	Total
House Wren	8	1	27	33	7	3	14	24	3	8	4	3	2	6	10	24	3	4	4	3	21	15	3	-	-	-	230
Winter Wren	-	-	-	2	-	-	-	-	-	2	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	6
Carolina Wren	-	-	2	4	4	1	9	47	2	5	1	1	4	21	8	23	15	24	28	-	19	83	15	12	-	1	329
Long-billed Marsh Wren	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	3	1	-	1	-	1	2	3	-	100	-	113
Short-bill. Marsh Wren	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	1	-	-	-	-	-	-	-	4
Mockingbird	-	22	13	13	4	15	70	69	22	24	8	4	15	41	11	84	5	96	72	2	52	444	84	20	-	1	1091
Catbird	2	7	7	20	1	4	25	32	5	19	8	16	13	42	23	90	10	33	31	15	100	171	81	14	-	-	769
Brown Thrasher	10	8	9	22	5	2	61	43	5	24	1	3	16	37	20	110	6	52	18	5	106	227	87	10	1	-	888
Robin	100	208	70	161	25	20	142	385	115	51	23	21	21	147	22	70	4	73	122	4	76	409	259	50	4	-	2620
Wood Thrush	6	-	8	16	1	1	61	69	10	19	8	7	17	53	50	23	8	12	20	17	69	46	69	8	3	-	605
Hermit Thrush	-	14	-	-	-	1	2	8	2	4	1	4	-	3	1	5	2	6	1	-	5	2	1	-	-	-	62
Swainson's Thrush	-	-	-	-	-	-	1	-	1	1	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	4
Gray-cheeked Thrush	-	-	-	2	-	-	2	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	5
Veery	-	-	-	1	-	-	1	1	-	6	1	5	-	-	1	-	-	1	1	3	-	-	1	-	-	-	22
Eastern Bluebird	11	4	3	2	2	1	7	109	-	5	4	5	2	3	-	-	1	2	5	-	5	3	28	18	-	-	220
Blue-gray Gnatcatcher	-	1	1	13	3	4	27	216	20	9	17	21	1	1	15	2	7	5	10	7	10	1	22	2	-	-	415
Ruby-crowned Kinglet	-	-	7	12	1	10	12	39	2	19	5	9	1	15	35	36	7	11	16	-	2	24	3	-	-	-	266
Water Pipit	-	-	-	-	10	-	15	2	-	-	-	-	-	-	-	-	-	-	-	-	2	-	1	-	-	-	30
Cedar Waxwing	-	-	-	-	-	-	-	42	-	-	-	-	-	-	-	-	20	-	-	6	16	-	10	-	-	-	94
Loggerhead Shrike	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	3
Starling	10	106	171	151	100	50	167	516	44	130	71	20	82	135	18	96	5	119	150	10	134	620	632	100	-	-	3537
White-eyed Vireo	-	-	-	-	-	1	24	5	2	9	6	15	3	9	14	15	6	6	4	3	18	3	28	4	-	-	175
Yellow-throated Vireo	-	21	1	-	-	-	4	30	1	-	-	8	6	4	10	1	-	1	5	4	6	-	7	-	-	-	103
Solitary Vireo	-	1	-	2	-	1	-	5	-	2	-	-	-	1	-	2	-	-	-	-	1	2	1	-	-	-	18
Red-eyed Vireo	-	1	8	-	2	-	-	53	-	1	-	10	3	14	16	6	4	5	16	2	15	5	30	2	-	-	193
Warbling Vireo	-	-	-	-	4	1	-	10	1	-	-	-	-	-	-	-	-	-	-	-	-	1	2	-	-	-	19
Black-&-white Warbler	-	1	1	-	-	2	11	9	2	9	3	12	4	14	32	18	7	2	21	5	9	10	11	2	-	-	184
Prothonotary Warbler	-	-	-	1	-	-	43	-	-	-	-	4	-	2	1	-	-	-	1	2	3	-	24	-	-	-	81
Worm-eating Warbler	-	-	1	-	-	1	4	12	-	7	-	-	-	-	11	1	1	-	-	3	3	-	3	1	-	-	48
Golden-winged Warbler	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	1	-	-	-	-	-	-	-	3
Blue-winged Warbler	-	-	-	1	-	-	1	-	4	-	-	3	2	-	1	2	2	2	-	1	2	-	2	2	-	-	25
Orange-crowned Warbler	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Nashville Warbler	-	3	-	-	-	-	1	8	-	-	-	1	-	-	1	-	-	-	-	-	1	-	-	-	-	-	15
Parula Warbler	-	-	1	-	3	-	14	108	2	2	7	16	5	16	31	13	62	12	27	2	13	-	5	4	-	-	343
Yellow Warbler	3	3	20	-	5	1	4	27	2	8	15	1	-	1	1	6	2	2	2	-	4	21	21	-	-	-	149
Magnolia Warbler	-	-	-	1	-	-	-	-	-	3	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	7
Black-thr. Blue Warb.	1	-	-	-	-	1	-	10	-	2	1	7	-	3	11	8	1	-	10	-	1	-	2	2	-	-	60
Myrtle Warbler	-	-	11	4	8	10	21	123	-	7	16	13	4	30	57	99	15	43	16	3	114	155	50	25	4	-	828
Black-thr. Green Warb.	-	-	2	3	-	1	2	10	-	9	1	2	1	4	24	4	2	-	4	4	1	2	-	-	-	-	76
Cerulean Warbler	-	10	1	-	-	1	6	28	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	48
Blackburnian Warbler	-	-	-	-	-	-	-	1	-	1	1	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	6
Yellow-throated Warb.	-	-	-	-	2	-	-	4	2	-	-	-	-	-	-	1	4	-	12	1	5	1	-	1	-	-	32
Chestnut-sided Warbler	-	-	-	2	-	-	3	2	-	3	-	5	-	5	5	1	1	2	-	-	1	3	1	1	-	-	35
Blackpoll Warbler	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-	-	5
Pine Warbler	-	-	1	-	-	-	-	3	-	-	-	-	-	2	3	-	2	2	-	9	8	-	12	8	-	-	50
Prairie Warbler	-	-	1	-	-	15	10	19	6	9	5	-	2	12	12	19	4	-	3	15	5	4	10	8	-	-	149
Palm Warbler	-	-	-	-	-	-	1	4	5	1	-	-	-	-	1	-	1	2	-	-	1	2	2	-	-	-	20

Species	Gar	All	Was	NFr	SFr	Cr1	How	Mon	Har	Bal	Lra	PRC	BRC	PrG	Ode	Gib	SAA	Ann	Cal	Cha	StM	Ken	Car	Tal	Dor	Wor	Total
Ovenbird	1	-	-	2	-	2	10	13	1	10	2	11	6	11	50	2	4	3	8	25	6	4	11	2	-	-	184
Northern Waterthrush	-	-	-	1	-	-	1	6	-	2	4	3	-	6	-	1	-	-	-	-	2	1	3	1	-	-	31
Louisiana Waterthrush	-	-	1	4	-	-	10	12	-	2	1	2	1	-	5	-	1	1	6	3	2	1	13	1	-	-	66
Kentucky Warbler	-	-	-	-	-	1	8	4	-	1	-	2	-	1	3	2	-	1	4	1	1	-	16	3	-	-	48
Yellowthroat	3	4	-	12	2	3	32	72	4	12	15	14	12	23	19	28	32	31	13	2	13	131	44	8	-	-	519
Yellow-breasted Chat	-	3	1	4	-	-	1	8	3	-	3	1	-	3	7	1	8	1	-	4	1	2	8	-	-	-	59
Hooded Warbler	-	-	-	-	-	-	1	2	-	2	-	4	6	5	30	25	5	-	21	5	3	-	2	-	-	-	111
Canada Warbler	-	-	-	-	-	-	-	3	-	-	-	-	-	1	1	-	-	-	-	2	-	-	-	-	-	-	7
American Redstart	-	3	3	4	-	-	17	78	6	4	6	31	10	21	31	6	-	1	7	4	1	2	-	4	-	-	239
House Sparrow	20	112	104	151	160	20	159	152	44	33	100	10	5	44	23	75	4	49	350	9	164	545	362	100	4	-	2797
Bobolink	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	2	-	-	-	-	7
Eastern Meadowlark	20	15	16	40	60	10	167	108	21	14	3	5	13	20	-	1	3	33	27	6	118	345	58	12	5	3	1123
Red-winged Blackbird	50	22	37	37	150	150	140	707	287	136	120	50	23	74	24	90	59	192	395	2	345	1703	543	42	150	6	5524
Orchard Oriole	-	-	1	4	3	-	2	13	-	-	-	-	-	-	-	1	1	2	-	-	1	1	17	1	-	-	47
Baltimore Oriole	3	7	7	4	8	1	5	21	-	5	-	2	-	2	-	1	-	1	1	-	3	10	17	1	-	-	99
Rusty Blackbird	-	1	-	-	-	-	6	88	-	-	-	52	-	3	5	1	50	-	-	-	-	2	1	2	-	-	211
Boat-tailed Grackle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	9
Common Grackle	15	390	604	382	300	100	371	817	129	116	33	50	110	135	104	44	137	127	546	15	1050	2056	1077	1000	44	10	9822
Brown-headed Cowbird	30	56	51	44	9	20	25	132	57	51	12	5	18	18	17	176	150	510	1110	9	27	465	213	20	-	-	3225
Scarlet Tanager	-	1	-	-	1	1	3	22	-	1	-	5	-	3	20	2	2	16	14	7	3	-	13	2	-	-	116
Summer Tanager	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-	2	-	-	-	-	6	2	-	-	-	13
Cardinal	8	46	52	47	14	3	103	296	32	30	11	21	15	55	52	166	150	192	117	20	98	898	202	42	-	3	2667
Rose-breasted Grosbeak	3	1	-	1	-	-	-	5	4	1	-	2	-	3	-	-	-	6	2	-	2	5	3	8	-	-	46
Blue Grosbeak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	2	7	-	-	-	-	10
Indigo Bunting	-	-	1	3	-	-	1	11	3	-	-	-	-	4	2	1	2	-	2	1	-	3	4	-	-	-	38
Evening Grosbeak	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1
Purple Finch	-	11	-	-	-	1	4	21	-	-	-	6	-	-	2	-	1	-	-	-	-	6	3	-	-	-	55
American Goldfinch	10	75	37	89	70	25	130	1138	29	60	25	44	95	42	52	34	23	46	92	8	79	118	186	30	2	2549	
Rufous-sided Towhee	15	34	15	48	3	10	95	158	25	54	20	21	27	74	61	370	72	129	71	7	119	373	130	15	4	4	1954
Savannah Sparrow	-	-	1	1	11	-	3	6	-	-	-	7	-	2	-	-	-	1	4	10	-	63	13	9	2	-	133
Grasshopper Sparrow	-	-	4	3	11	-	27	16	-	5	-	-	-	2	-	-	2	-	-	2	3	4	9	2	-	-	90
Henslow's Sparrow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-	5
Seaside Sparrow	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	50	8	-	70
Vesper Sparrow	-	-	5	2	21	1	4	4	-	1	-	-	-	-	-	-	-	-	-	-	-	11	-	-	-	-	49
Slate-colored Junco	7	11	16	5	-	1	3	12	-	33	1	3	-	3	5	3	1	6	5	-	-	22	5	3	-	-	145
Chipping Sparrow	50	44	53	32	7	4	58	86	25	21	2	2	11	35	21	67	7	38	310	9	54	187	136	8	-	-	1277
Field Sparrow	15	9	24	77	16	6	61	89	12	23	4	3	9	51	15	12	57	49	32	11	33	118	94	8	-	-	833
White-crowned Sparrow	-	-	-	5	-	-	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-	5	-	2	-	-	19
White-thrtd. Sparrow	9	60	58	163	9	4	79	466	3	119	22	200	11	66	198	440	163	84	107	9	745	171	447	150	-	1	3784
Swamp Sparrow	-	-	-	10	-	2	7	7	-	5	15	-	-	3	12	2	8	3	2	-	31	7	11	1	-	-	131
Song Sparrow	19	43	18	39	15	2	72	108	59	13	10	17	3	49	4	19	8	61	27	4	15	127	22	12	2	11	779
TOTAL SPECIES	56	73	73	85	75	75	99	148	80	111	84	106	55	87	87	110	110	97	98	69	126	146	124	117	30	52	227
TOTAL INDIVIDUALS	{ 675	1910	1311	3289	4715	1113	734	1576	2230	4736	7855	7081	463	97886													
TOTAL PARTY-HOURS	10	19	24	17	9½	5	30	77	9	35	16	12	10	22	26	34	16	24	31	10½	17	130	77	18	2	3½	684½

Summary of Coverage

GARRETT COUNTY (Gar). Carey Run Sanctuary and Grantsville area. 3 observers in 1 party. 6 a.m. to 4 p.m. 45 party-miles (5 on foot, 40 by car). Charlotte Folk, Donald Fritz, Billie Taylor (compiler).

ALLEGANY COUNTY (All). 5 observers in 2 parties. Mr. & Mrs. K. P. Lapeyre, Mrs. J. Minke, Mr. & Mrs. E. H. Reynolds.

WASHINGTON COUNTY (Was). 7 observers in 4 parties. No time or mileage furnished. Sarah Baker, Carl Carlson, Mrs. Robert L. Downin II, Stanley R. Eckstine, Mrs. Alice Mallonee, Billy Mallonee, Dr. Ralph S. Stauffer.

NORTHERN FREDERICK COUNTY (NFr). 6 observers in 2 parties. 5 a.m. to 5 p.m. Miles not furnished. Sarah Baker, Carl Carlson, Mary Motherway, Charles Mullican (compiler), William Shirey, Dorothy Wilson.

SOUTHERN FREDERICK COUNTY (SFr). 2 observers in 1 party. 7:00 a.m. to 4:40 p.m. 30 party-miles (5 on foot, 25 by car). Mr. & Mrs. Edwin T. McKnight.

CARROLL COUNTY (Car). 7 observers in 1 party. 7 a.m. to 12 noon. 26½ party-miles (1½ on foot, 25 by car). Mrs. Coe, Bill Hilgartner (compiler), Rodney Jones, Bertha Poe, Bill Worthley, Dr. Elmer Worthley, Jean Worthley.

HOWARD COUNTY (How). 7 observers in 4 parties. 4:50 a.m. to 8:30 p.m. 118 party-miles (21 on foot, 97 by car). Morris Collins, Mrs. G. C. Munro, Mrs. H. B. Rauth, Chandler S. Robbins (compiler), George Robbins, Jane Robbins, Stuart Robbins.

MONTGOMERY COUNTY (Mon). 59 observers in 13 parties. 5:30 a.m. to 8:30 p.m. Miles not furnished. Dale, Kathleen & Kathy Braeuninger, Patricia Brown, Ruth Cahn, Jane Church, R. M. Cole (compiler for Audubon Naturalist Society), Alan & Ronald Davies, Philip DuMont, Margaret & Morrill Donald, Mr. & Mrs. T. P. Ginn, Viola & Harry Hogan, L. J. Holtsclag, D. C. Keys, Marcia Lakeman, Gilbert & Harriet Morgan, Marcia Nelson, J. W. Oberman, Iani & Lewis Pyle, L. Pyle, R. Pyle, Billie Ruch, Eloise Shaw, Grace Sims, Brian Skinner, Robert L. Smith, David Wones, E. R. Pfeiffer.

HARFORD COUNTY (Har). 7 observers in 1 party. 7:30 a.m. to 4:30 p.m. Miles not furnished. Mrs. Gladys Cole, Mrs. Early, Dr. & Mrs. E. Folk, Mrs. Shirley Geddes (compiler), Mrs. Evelyn Gregory, Mrs. M. G. Larrabee.

BALTIMORE CITY AND COUNTY (Bal). 12 observers in 4 parties. 5:00 a.m. to 4:30 p.m. Incomplete party-miles (at least 6½ on foot, 45 by car). Amelia Andres, Tommy Andres, Jane Daniels, Janet & John Ganter, Charles Hauss, Alice Kaestner, Bonnie Mogavero, Ed Rykiel, Stephen W. Simon.

LOCH RAVEN, BALTIMORE COUNTY (Lra). 3 observers in 2 parties. 6 a.m. to 7 p.m. 25 party-miles (5 on foot, 20 by car). William Corliss, Gerald Elgert (compiler), Donald H. Messersmith.

PATUXENT RESEARCH CENTER, PRINCE GEORGES AND ANNE ARUNDEL COUNTIES (PRC). 3 observers in 2 parties. 6 a.m. to 6 p.m. 15 party-miles (10 on foot, 5 by car). Jim Christensen, Willet T. Van Velzen (compiler), John Westgate.

BELTSVILLE AGRICULTURAL RESEARCH CENTER, PRINCE GEORGES COUNTY (BRC). 2 observers in 1 party. 6 a.m. to 4 p.m. 20 party-miles (5 on foot, 15 by car). P. Sonnel, Tom Valega (compiler).

PRINCE GEORGES COUNTY (PRG). 5 observers in 4 parties. 5 a.m. to 8 p.m. 42 party-miles (13 on foot, 29 by car). Glenn Austin, Herbert E. & Mildred M. Douglas, Melvin Kleen, Jesse Mason.

ODENTON, ANNE ARUNDEL COUNTY (Ode). 3 observers in 3 parties. Primarily 5:30 a.m. to 8:30 p.m. 32 party-miles (14 on foot, 18 by bicycle). William Anderson, Danny Bystrak, Paul Bystrak (compiler).

GIBSON ISLAND, ANNE ARUNDEL COUNTY (Gib). 20 observers in 3 parties. 5 a.m. to 5 p.m. 21 party-miles (6 on foot, 15 by car). Mr. & Mrs. Charles Buchanan, Mrs. Robert Cochran, Mrs. Richard Henderson, Judge & Mrs. W. L. Henderson, Mr. & Mrs. Robert Johnson, Mr. & Mrs. Jackson Kidd, Mrs. Parkes Kuhn, Mrs. John Leader, Mr. & Mrs. Robert Leads, Mr. & Mrs. George Metcalf, Dr. Elliot Randolph, Mrs. Elden Symington, Mrs. Gail Tappan (compiler), Miss Etta Wedge.

SOUTHERN ANNE ARUNDEL COUNTY (SAA). 7 observers in 3 parties. 5 a.m. to 3:30 p.m. Mileage not given. William Emison, Pat Monaghan, W. J. L. Sladen (compiler), Max C. Thompson, Frank & Martha Williams, Robert Woods. Ivy Neck--Java Farms only.

ANNAPOLIS AREA, ANNE ARUNDEL COUNTY (Ann). 8 observers in 6 parties. 5 a.m. to 8 p.m. 35 party-miles (6 on foot, 29 by car). Mrs. Paul E. Fuhrman, Mr. & Mrs. David Howard, Fran Jaques, Dr. Hildegard Reissman, Mrs. J. Stewart Welton, Harold Wierenga, Cdr. Edw. P. Wilson.

CALVERT COUNTY (Cal). 5 observers in 3 parties. 5:45 a.m. to 8:30 p.m. 96 party-miles (14 on foot, 82 by car). Lewis A. Buck, Porge Buck, John Fales, Iddie Flyger, Alta Gras.

CHARLES COUNTY (including a small portion of St. Marys County)(Cha). 2 observers in 1 party. 6 a.m. to 4:30 p.m. 47 party-miles (all by car). Dr. Robert W. Ficken, Betty Stone (compiler).

ST. MARYS COUNTY (StM). 3 observers in 1 party. 3:15 a.m. to 8:30 p.m. 173 party-miles (5 on foot, 168 by car). Richard Jachowski, Vernon M. Kleen (compiler), Steven Robidoux.

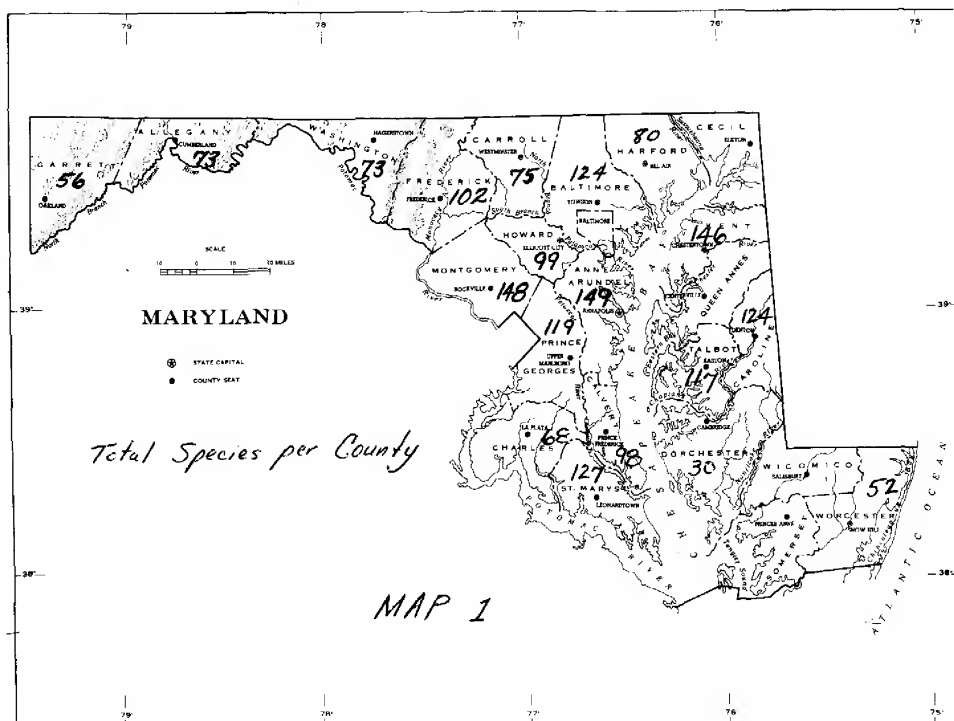
KENT COUNTY (Ken). 29 observers in 10 parties. 5:00 a.m. to 6:45 p.m. 220 party-miles (20 on foot, 200 by car). Mr. & Mrs. Howard Bailey, Roberta Brandt, Dr. George Burger, Mr. & Mrs. Thomas Carswell, Charles Cockey, Mr. & Mrs. Harry Crosby, Dr. & Mrs. Antony Delario, Mr. & Mrs. Thomas Eliason, Mrs. Mary Emerine, Mr. & Mrs. William Friedburg, Daniel D. Gibson (compiler), Dr. Daniel Z. Gibson, Mr. & Mrs. Brian Kane, Mr. & Mrs. Mabon Kingsley, Mr. & Mrs. Edward Mendenhall, Mr. & Mrs. Roy Ruhnke, Dr. & Mrs. Turner Smith, Carl Westerdahl.

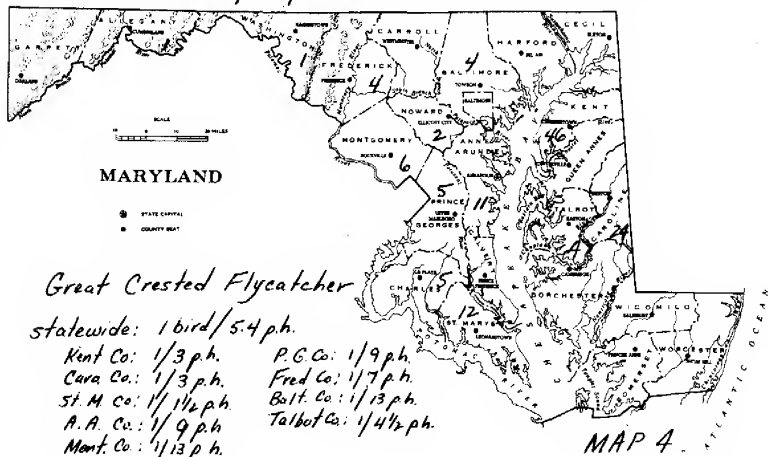
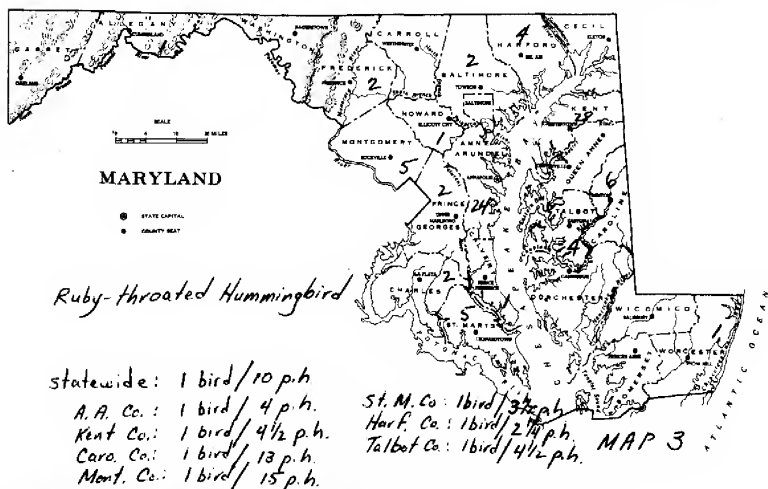
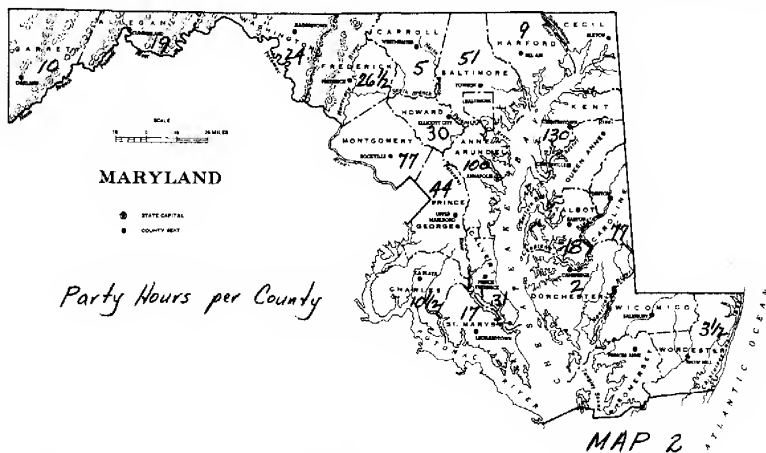
CAROLINE COUNTY (Car). 23 observers in 12 parties. 5:00 a.m. to 7:30 p.m. 353 party-miles (20 on foot, 333 by car). Annabelle Bilbrough, Elsie Bilbrough, Irene Bilbrough, Margarete Butenschoen, Winifred Bright, Dorothy Dreschnak, Jean Du Pont, A. J. Fletcher, Roberta B. Fletcher, Marvin H. Hewitt, Alicia Knotts, Aldridge Pepper, Essie Pepper (compiler), Robert Pepper, Ethel Poore, Carol Scudder, Edna Scudder, John Scudder, Percy Scudder, Jacqueline Smith, A. May Thompson.

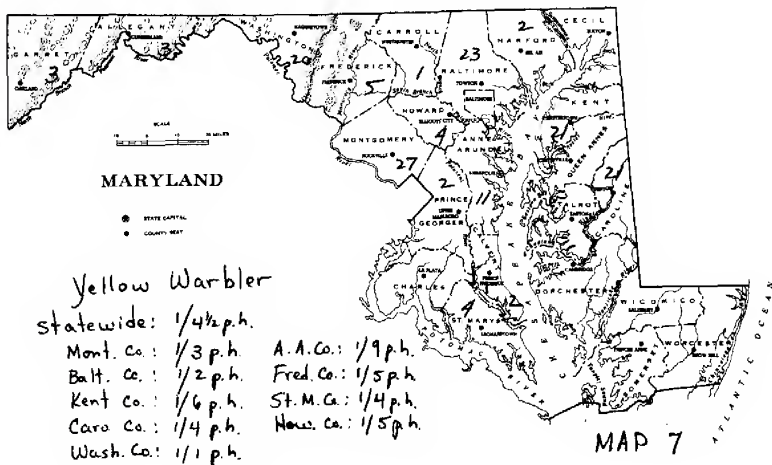
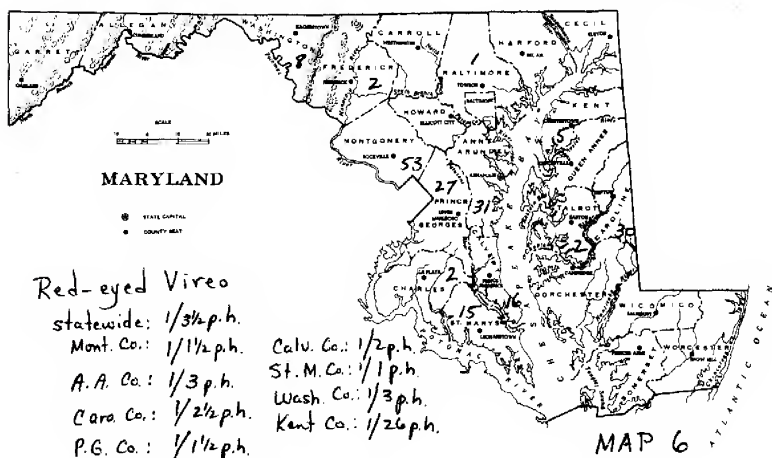
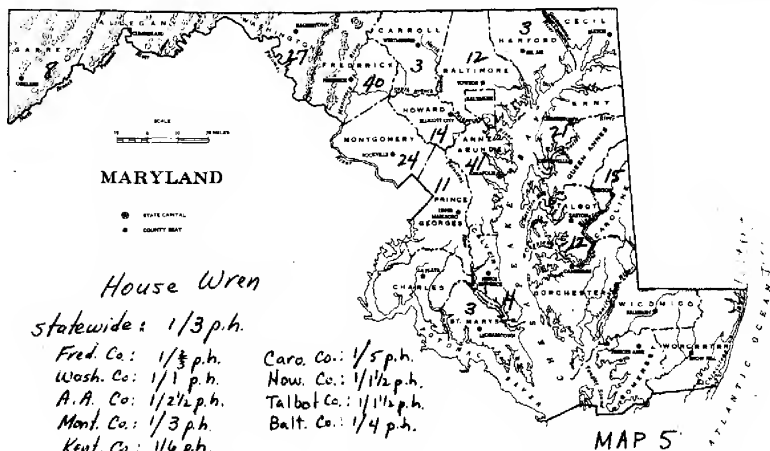
TALBOT COUNTY (Tal). 4 observers in 4 parties. 162 party-miles (4 on foot, 8 by boat, 150 by car). Chris Clark, Richard L. Kleen (compiler), Don Meritt, Jan Reese.

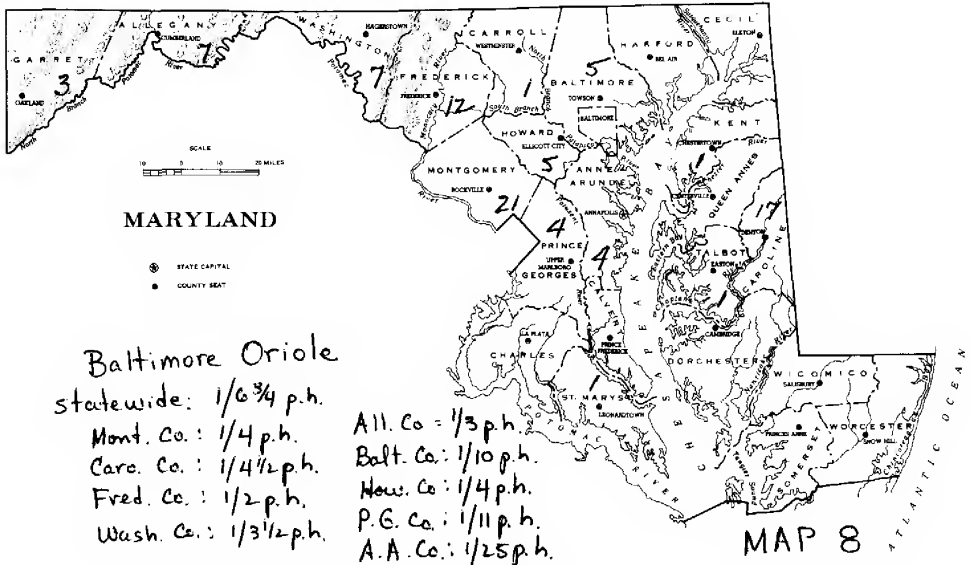
DORCHESTER COUNTY (mainly Elliott Is. road) (Dor). 3 observers in 1 party. 6 p.m. to 8 p.m. 29 party-miles (1 on foot, 28 by car). Dr. H. McClure Johnson (compiler), Benjamin & Harry Johnson.

WORCESTER COUNTY (mainly Ocean City area) (Wor). 3 observers in 1 party. 16 party-miles (2 on foot, 14 by car). Dr. H. McClure Johnson (compiler), Benjamin & Harry Johnson.









ORANGE-CROWNED WARBLER IN MONTGOMERY COUNTY IN SPRING

Robert L. Smith and David R. Wones

While participating in the State-wide Bird Count on May 1, 1965, we observed an Orange-crowned Warbler along the C. and O. towpath near Pennyfield Lock east of Seneca. This warbler, which we identified independently, was feeding 15 feet up in the tops of low swamp saplings. We recognized it by the nondescript overall greenish body color, vague breast streaking, pale eye stripe, and yellowish under tail coverts. We also noticed the lack of an eye ring and of wing bars. The orange crown was not visible. We observed this bird at leisure and to our complete satisfaction over a period of 2 or 3 minutes. Both of us are familiar with summer Orange-crowned Warblers in New Mexico and one of us (RLS) is familiar with wintering birds in the Sacramento Valley of California.

MIGRATING WATERFOWL AT SENECA

Robert W. Warfield

In the March issue¹ it was suggested that it would be of interest to have more information on the species and numbers of waterfowl that occur during migration along the Potomac River at Seneca. While this piedmont area has been covered many times in the Spring and Christmas counts of the Maryland Ornithological Society, a detailed count of the waterfowl present during the spring migration period has not been available previously. Stewart and Robbins² have, however, given many records of uncommon species and high counts of various waterfowl seen in the Seneca

area. The present communication summarizes the species and numbers of waterfowl found by me in the Seneca area from mid-February until mid-May 1965.

The area covered consisted of the Potomac River and immediately adjacent marshes from the rapids (Seneca Breaks) to a point one and a half miles upstream. This area and a general description of its bird life have been the subject of a recent paper by Carlson³. Most of my counts were made early in the morning and the usual procedure was to walk downstream to check the rapids for diving ducks, then walk upstream. Both 8x35 binoculars and a 40-power telescope were employed.

Daily totals are shown in Tables 1 and 2. Some of the higher totals in late March and early April had to be estimated. Noteworthy was the early spring arrival date for the 2 Pied-billed Grebes. As far as can be determined this is the earliest spring arrival date for this species for Montgomery County. The unusually warm days in early February may account for their early arrival. The relatively small numbers of Common Golden-eyes appear to be unusual. In previous years much larger flocks have been seen during March.

The swans seen on March 12 and 13 flew upstream in the late afternoon of the 13th. Three flocks of Canada Geese were seen on March 28. Each flock made about a 90-degree turn over Seneca and continued on, flying almost directly north. I have repeatedly noted that many of the flocks seen in the spring over my home appear to have come up the Potomac Valley and then turned to a more northward course.

The data show that 22 species of waterfowl were seen at Seneca this spring. Three other species, Gadwall, Shoveler, and Canvasback, were seen in small numbers during March and April several miles upstream in the Sycamore Landing area. Study of BIRDS OF MARYLAND² reveals that, barring accidentals or rare occurrences, a total of about 25 species might reasonably be expected. Thus, as far as number of species is concerned, the coverage was satisfactory.

The data in Tables 1 and 2 can be contrasted with the smaller numbers seen in the spring of 1964 at two other piedmont locations, Loch Raven Reservoir⁴ and Triadelphia Reservoir¹. These contrasts partially emphasize the large numbers of waterfowl that use the Potomac Valley as a flyway and also show the importance of preserving this area in its natural state.

References

1. Warfield, R. W., Maryland Birdlife 21: 20 (1965).
2. Stewart, R. E., and C. S. Robbins, Birds of Maryland and the District of Columbia. N. A. Fauna 62, U.S.D.I., Washington, D.C. (1958).
3. Carlson, C. W., Atlantic Naturalist 20: 15 (1965).
4. Kaestner, H., Maryland Birdlife 20: 75 (1964).

R. F. D. #1, Hereford Hills, Germantown

Table 1. Migrant Waterfowl at Seneca in Early Spring

Species	February					March					
	13	20	21	27	28	6 ^a	13 ^b	14 ^b	21	27	28
Horned Grebe	1	-	-	-	-	-	1	2	-	-	-
Pied-billed Grebe	2	1	1	1	-	-	-	-	-	-	-
Whistling Swan	-	-	-	-	-	-	34	-	-	-	-
Canada Goose	-	-	-	-	-	-	-	-	-	-	385
Mallard	-	-	-	-	2	-	-	-	2	3	3
Black Duck	-	-	-	-	-	-	-	-	70	8	2
Pintail	10	-	-	-	-	-	-	-	10	-	-
Green-winged Teal	-	-	-	-	-	-	-	-	-	-	2
Blue-winged Teal	-	-	-	-	-	-	-	-	10	8	25
Wood Duck	-	-	-	-	-	-	-	2	15	12	25
Redhead	-	-	9	62	50	4	20	-	-	20	-
Ring-necked Duck	-	-	-	-	-	-	-	-	-	33	16
Greater Scaup Duck	1	3	20	5	30	3	2	-	-	-	-
Lesser Scaup Duck	-	10	60	3	-	1	20	9	60	-	-
Common Goldeneye	-	2	-	-	6	-	-	-	2	-	-
Bufflehead	3	8	2	4	-	-	2	2	2	2	2
Ruddy Duck	-	-	-	-	-	-	-	-	-	1	-
Hooded Merganser	-	-	-	-	-	-	-	-	-	4	-
Common Merganser	2	3	17	20	3	2	6	6	2	55	53
Red-breasted Merganser	-	-	-	-	-	-	-	-	-	-	2

a = Potomac River at flood stage

b = An additional flock of about 50 high-flying ducks was seen

Table 2. Migrant Waterfowl at Seneca in Late Spring

Species	April							May						
	3	4	10	11	17	18	29	1	2	4	5	6	8	9 15
Common Loon	-	-	-	-	2	-	-	1	1	3	1	2	1	1 -
Horned Grebe	2	2	14	5	9	-	-	-	-	-	-	-	-	1 -
Pied-billed Grebe	-	-	-	-	2	1	-	-	-	-	-	-	-	-
Mallard	1	-	-	-	1	-	2	-	-	-	-	-	-	-
Black Duck	-	2	2	-	-	-	-	-	-	-	-	-	-	-
Green-winged Teal	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Blue-winged Teal	25	25	-	9	13	7	7	2	-	-	1	1	2	-
American Widgeon	-	-	8	-	-	-	-	-	-	-	-	-	-	-
Wood Duck	25	30	6	2	17	7	6	4	4	6	6	9	5	1 1
Ring-necked Duck	20	20	11	20	-	18	-	-	-	-	-	-	-	-
Greater Scaup Duck	-	-	7	-	15	-	-	-	-	-	-	-	-	-
Lesser Scaup Duck	10	-	-	-	3	5	2	32	5	9	-	2	18	2 -
Common Goldeneye	-	-	2	-	-	-	-	-	-	-	-	-	-	-
Bufflehead	-	-	-	4	2	12	-	-	-	-	-	-	-	-
Ruddy Duck	-	-	-	-	-	3	-	1	6	1	-	6	-	4 1
Common Merganser	-	-	-	2	1	-	2	1	-	-	-	-	-	-
Red-breasted Merganser	4	-	70	-	26	6	21	-	-	8	-	3	5	2 1

FIFTY THOUSAND BIRDS
RECORDED ON BREEDING BIRD SURVEY

Chandler S. Robbins

The Breeding Bird Survey that was conducted in Maryland and Delaware this summer by members of the Maryland Ornithological Society and the Delmarva Ornithological Society was highly successful. The present report summarizes the results of the 50 routes that were covered in Maryland.

As explained in the June issue of Maryland Birdlife (21: 48-49), starting points of the 50 routes were picked at random; each route consisted of 50 three-minute stops spaced one-half mile apart; all birds heard during the three minutes were recorded; and all birds seen within one-fourth mile of the observer also were recorded. Coverage began one-half hour before official sunrise, and it took approximately four hours to complete each route.

Each of the 50 routes was covered once, and, in addition, most observers covered one of eight "check routes" that I had covered a few days earlier. This unique check route feature makes it possible to compensate roughly for the differences between observers--and thus compare not only each route with itself in future years, but also compare the relative abundance throughout the State of any of the more common species. Check routes were run for 46 of the 50 routes. One of the check routes was run five times by the same observer to determine the normal variation from day to day as well as the seasonal change from late May to mid-July.

The field records were put on punch cards at the Migratory Bird Populations Station in Laurel. The species totals and the maps presented herewith are compiled from the first of a series of tabulations to be made on a Univac 1401; these maps are all based on the actual figures reported by the observers, rather than on computed data.

A word of caution is in order because the figures recorded on this survey do not measure actual abundance. It is impossible to observe all of the birds at each of the 50 stops. We merely obtain a sample of population--and how good a sample we achieve depends upon the relative conspicuousness of each species. In general, large birds, brightly colored birds, those with loud songs, and those that sing or call most frequently will be observed in greatest numbers in comparison with their actual abundance. Those that continue to sing frequently throughout June and early July will appear to be more common than species such as the Brown Thrasher and some of the woodpeckers, which are quiet during much of June. Field birds are more easily observed than woodland birds, and a roadside survey tends to favor residential and field habitats rather than woodland, marsh and swamp. Furthermore, open country birds that have young on the wing early in June, such as Starlings and grackles, will be listed in disproportionately large numbers. Bear these limitations in mind when reading the following figures.

The twenty species recorded in the greatest numbers were:

<u>Species</u>	<u>Individuals</u>	<u>No. of Stops</u>	<u>Species</u>	<u>Individuals</u>	<u>No. of Stops</u>
Common Grackle	7,480	1,227	Eastern Meadowlark	1,176	597
House Sparrow	5,840	958	Indigo Bunting	1,077	788
Starling	4,948	973	Mourning Dove	1,074	633
Red-winged Blkbird	2,846	770	Chipping Sparrow	977	607
Robin	2,324	1,060	Wood Thrush	968	582
Bobwhite	2,129	1,192	Field Sparrow	967	639
Common Crow	1,642	876	Rufous-sided Towhee	853	565
Mockingbird	1,488	998	Catbird	771	416
Cardinal	1,218	821	Song Sparrow	722	494
Barn Swallow	1,196	340	Red-eyed Vireo	665	486

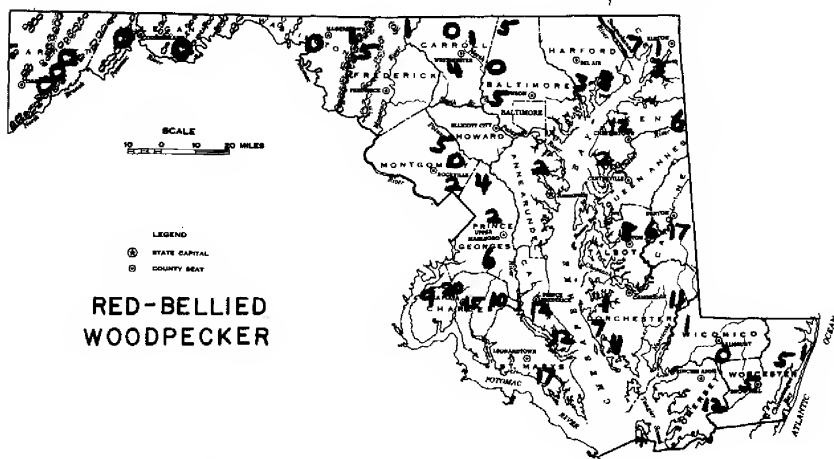
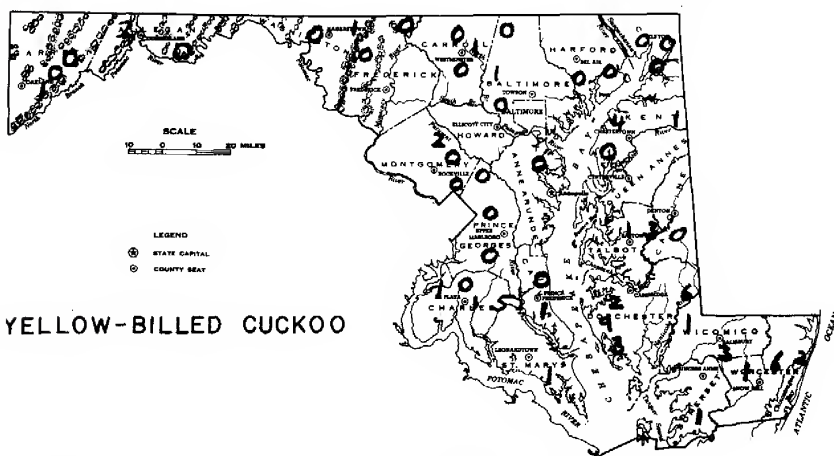
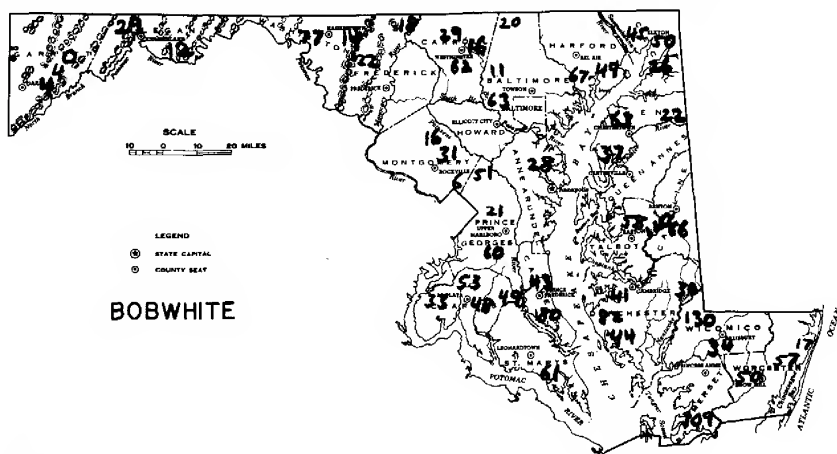
The total number of birds listed was 50,373, or an average of 1,007 individuals per route, or 20 per stop. The number of species per route averaged 55, with surprisingly little difference between observers. The total number of stops was 50 times 50, or 2,500, so the number of stops at which each species was observed can easily be converted to a percentage (49% for the Common Grackle, 19% for the Red-eyed Vireo, etc.). Thus an observer stopping for three minutes can expect to find one or more Common Grackles at one stop out of two, and one or more Red-eyed Vireos at one stop out of five.

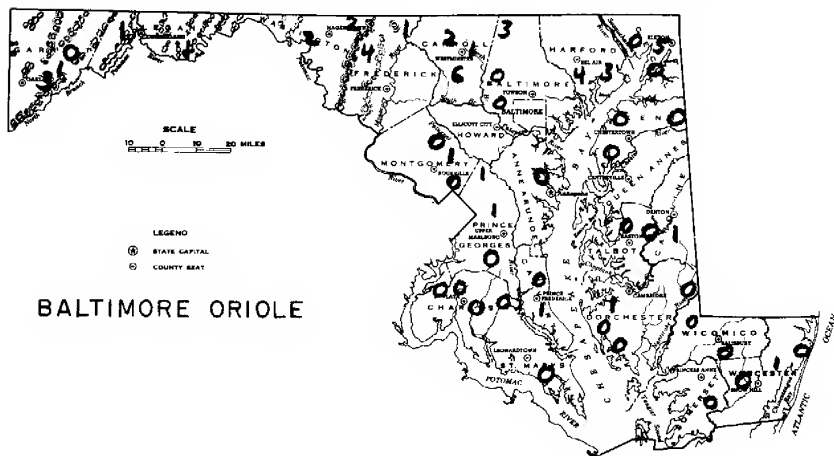
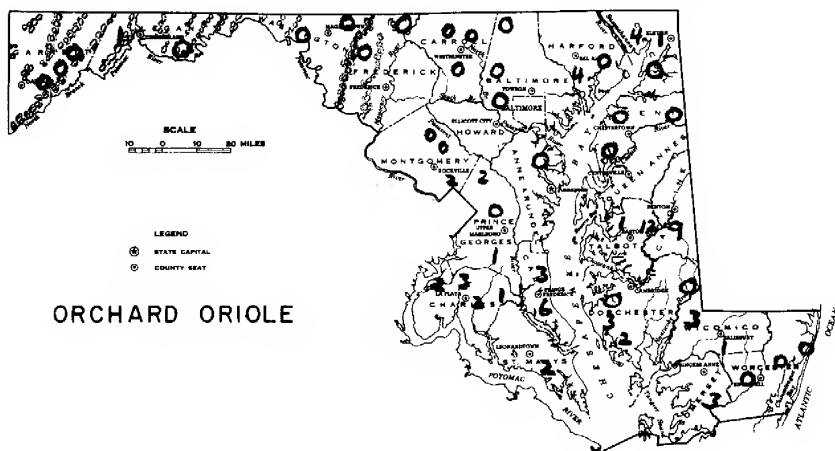
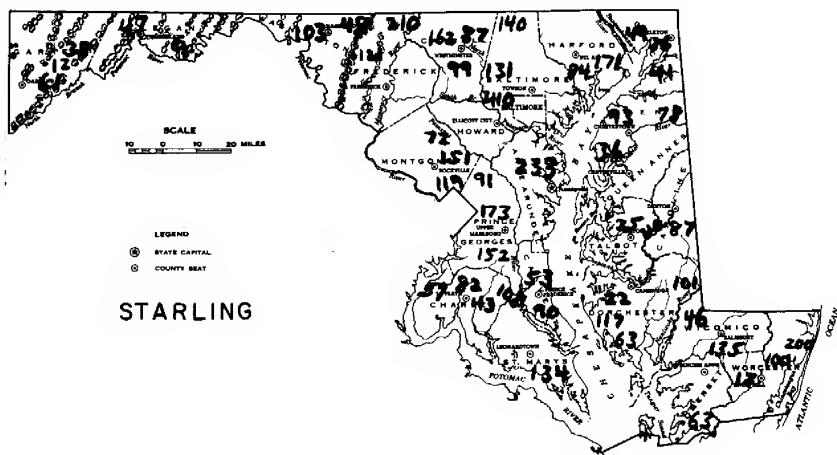
The total number of species recorded was 153. Only nine species were found on all 50 routes: Mourning Dove, Common Crow, Robin, Wood Thrush, Starling, House Sparrow, Common Grackle, Cardinal, and Indigo Bunting. Eight others were found on 49 routes out of 50: Bobwhite, Barn Swallow, Blue Jay, Catbird, Red-eyed Vireo, Rufous-sided Towhee, Chipping Sparrow, and Field Sparrow.

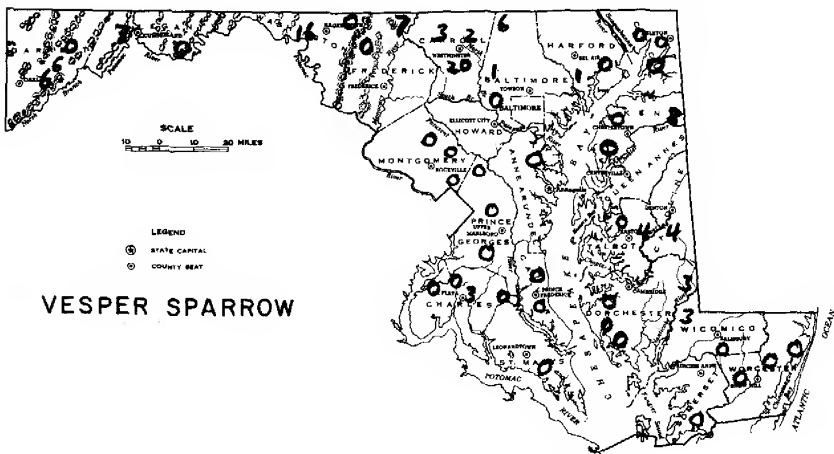
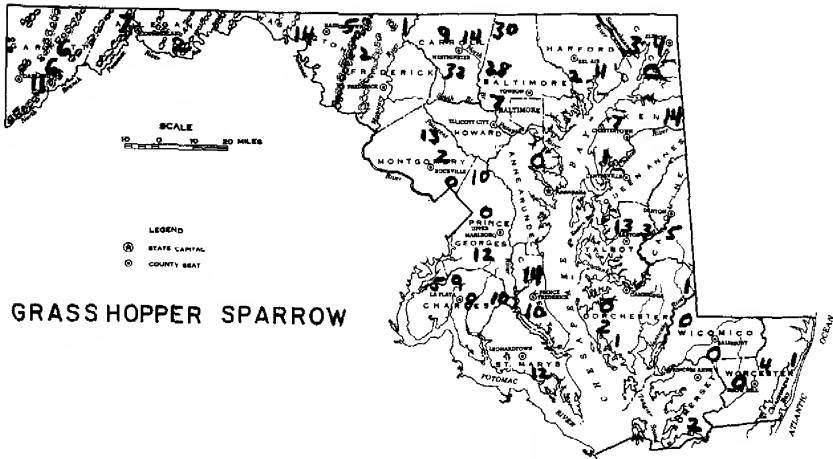
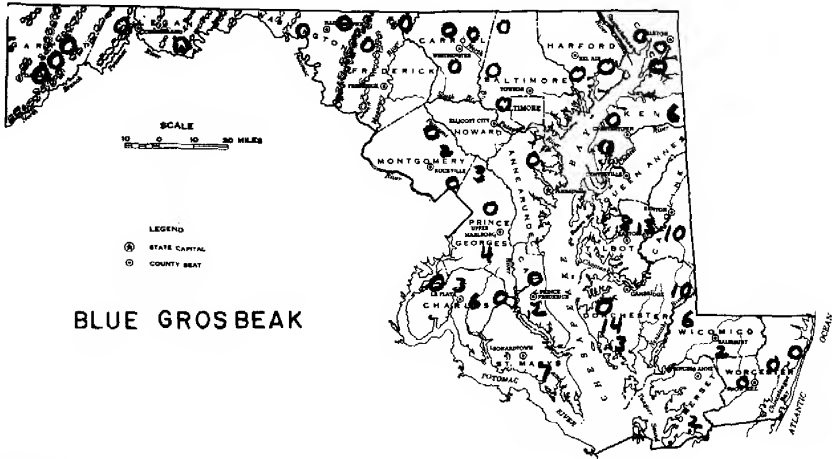
Totals for a few of the less common species may be of interest:

<u>Species</u>	<u>Individuals</u>	<u>No. of Stops</u>	<u>Species</u>	<u>Individuals</u>	<u>No. of Stops</u>
Cattle Egret	30	4	Eastern Bluebird	103	71
Ring-necked Pheasant	106	54	Worm-eating Warbler	29	21
Ruby-thr. Hummingbird	49	39	Hooded Warbler	21	20
Pileated Woodpecker	14	11	Scarlet Tanager	210	174
Traill's Flycatcher	6	5	Blue Grosbeak	100	87
Veery	69	39	Grasshopper Sparrow	352	244

The twelve maps illustrate changes in abundance throughout the Maryland breeding range of selected species. The Bobwhite reaches its greatest abundance on the Lower Eastern Shore and is scarcest on the Allegheny Plateau. The Yellow-billed Cuckoo shows a most peculiar distribution this year because it did not arrive in numbers until late June and early July--after most of the routes had been covered. The Red-bellied







Woodpecker becomes gradually scarcer as it approaches the limit of its range just above the Mason-Dixon line. The Blue Jay is scarce at both extremes of the State, but is surprisingly well distributed elsewhere even on the uplands of the Eastern Shore. Mockingbird numbers are remarkably consistent in counties bordering on the Bay and the lower Potomac. The Eastern Bluebird is well distributed only in Southern Maryland and the upper Piedmont; it is strangely absent from most of the Eastern Shore.

The ubiquitous Starling is abundant except in the more heavily wooded areas of Western Maryland. The Orchard Oriole is well distributed through the southern half of the State, but is replaced by the Baltimore Oriole in the Piedmont and in the Appalachians. The Blue Grosbeak reaches its greatest numbers in upland areas of the Central Eastern Shore. The Grasshopper Sparrow nests in all parts of Maryland, but favors the upper Piedmont. The Vesper Sparrow reaches its southern limit in the Piedmont except for a small, but consistently distributed, population in upland areas of the Central Eastern Shore.

Interesting as the above findings may be, the greatest value of the Survey will be realized in subsequent years when repeated coverage will enable us to measure any important increases or decreases in the breeding populations of individual species. Since the trial run this year in Maryland and Delaware proved so successful, we plan to expand the Survey to other States in 1966.

We wish to thank the 35 observers and 25 assistants whose wonderful cooperation made this survey a success. The following observers covered two or more routes in Maryland or Delaware, in addition to running one of the check routes: Glenn Austin, Richard Banvard, A. D. Braeuninger, David Bridge, Paul Bystrak, Carl W. Carlson, Mrs. Richard D. Cole, W. Russell DeGarmo, Mr. and Mrs. A. J. Fletcher, Dr. Bertram Haines, Hank Kaestner, Richard Kleen, Vernon Kleen, Miss Marcia Lakeman, John T. Linehan, Peter P. McLaughlin, Terry S. Moore, Charles Mullican, Dr. J. William Oberman, Dr. Robert L. Pyle, Chandler S. Robbins, Mrs. Carol E. Scudder, Dr. William N. Shirey, Dr. William J. L. Sladen, Dr. Turner L. Smith, Dr. Karl Stecher, Jr., Allen Stickley, Dr. Thomas Valega, and T. Van Velzen.

The following ran one survey route each: Edward Addy, Samuel H. Dyke, Don Meritt, Edgar Reynolds, and Mrs. Cynthia Turner.

These people assisted in the capacity of drivers, record keepers, navigators or trainees: Mrs. Sarah S. Baker, A. D. Braeuninger, P. Brody, Danny Bystrak, Dr. W. S. Clark, Mrs. Ethel Cobb, Mrs. Arlene Delario, Mrs. Mary J. Haines, Kit Hannon, Melvin Kleen, Mrs. Betty J. Linehan, Mrs. Dorothy Mendinhall, Donald Meritt, E. Monaghan, Miss Marcia Nelson, Mrs. Alpha Reynolds, Mrs. J. Ropes, Ed Rykiel, Pat Slavin, Mrs. Jane D. Smith, P. Sonnet, Ted Stiles, Robert Sundell, and Dr. Frank Williamson.

Migratory Bird Populations Station, Laurel

THE PRESIDENT'S PAGE

V. Edwin Unger

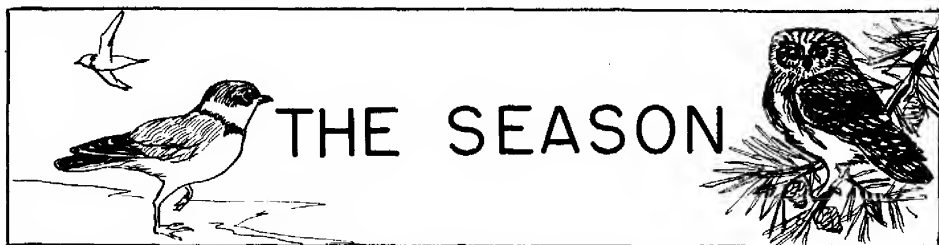
I have been thinking about the work of the Society and about you. There are those of you whose interest in bird life stems from your love for their beauty of song and feather, and from the fact that you find birds to be interesting, entertaining and companionable. At the other end of the line are those who, by occupation or through formal study and research, are involved in pure ornithology. In between, are all the rest of us who, according to our tastes or talents may be interested for any of a number of reasons. There are those who merely wish to learn to recognize by sight and song all the species of their environs. Others, having done so, will wish to enlarge their list of known species by taking in more and more geographical territory and at the same time learning all they can about each species. Then, there are the banders, most of whom are dedicated to one or more specific projects of study. Others are busy with nesting-box projects and others with the compilation of nesting records. Many are engaged in some phase of conservation. Others are hard at work on a sanctuary project. Deserving especial notice and mention are those who devote a large share of their time to the instruction of youngsters in the learning and lore of ornithology.

These, then, are the people of M. O. S. The Society belongs to them and exists for them. So, regardless of any member's particular interest, he or she has a right to expect to find something of interest and something meaningful within the structure of the Society. We who are officers, trustees, councilmen or committeemen, as servants of those who "own" the Society, must dedicate ourselves to their varied wishes, hopes and aspirations. The growth and the attainments of the organization to date convince me that those who have served in the past must have been of like feeling. If we, in the conduct of its affairs, will make the Society's work and activity interesting to all members, it will then have an appeal for countless others, thereby enlarging its sphere of influence and usefulness.

All of this leads up to just one thing. I hope that the membership of the Society will become vocal and articulate. I want to know your wishes, your hopes, your desires. With a salute to those who have worked so hard to bring the organization to its present stature, I seek your suggestions for any improvement to the current program or for new activities. I am especially anxious for suggestions concerning next year's Convention, realizing that many members come in direct and personal contact with the Society only at the Annual Convention. It is then my hope that for these folks - and may their number increase - the Convention shall provide everything they expect and desire.

I welcome, yes, I solicit, your suggestions or criticism. Each can and should help to shape and build the Society's future. I hope you will.

West Central Ave., Federalsburg



APRIL, MAY, JUNE, 1965

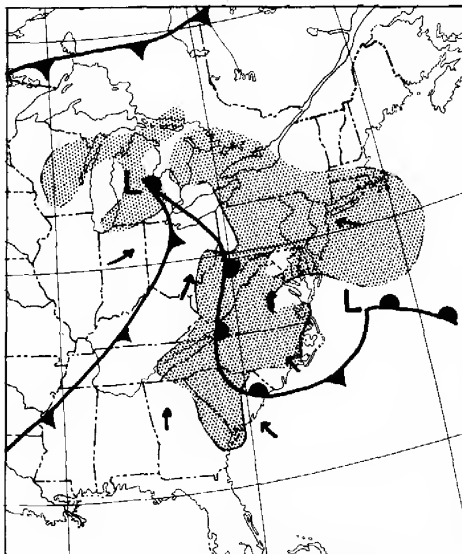
Chandler S. Robbins

Twenty-five million migrants were "grounded" by weather conditions in the Ocean City area on April 27! This astonishing estimate was reported by James Carroll, Joseph Devlin, and John C. Miller on the basis of sample counts made along the barrier beach in a ten-mile stretch from Ocean City to Fenwick Island. There were several remarkable features of this unprecedented concentration: First and foremost is the total number of birds present in this small area--several million birds per square mile. Second is the small number of species involved. Only seven species were noted in unusual numbers: 9,000,000 Savannah Sparrows, 6,000,000 Rufous-sided Towhees, 4,000,000 White-throated Sparrows, 3,000,000 Brown Thrashers, 2,000,000 Hermit Thrushes, 1,000,000 Catbirds, and a mere 1,000 Field Sparrows. The third anomaly was that such tremendous numbers of Savannah Sparrows and even more especially of Hermit Thrushes were still moving through Maryland at the end of April and that their peak coincided with that of the Catbird, which is primarily a May migrant.

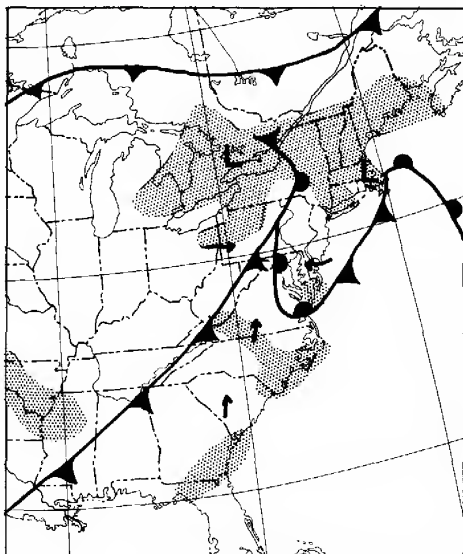
It is indeed a pity that such spectacular precipitations of birds cannot be predicted in advance so more observers can have an opportunity to witness them. Reviewing weather maps in retrospect it is easy to explain why the massive movement took place, why the birds became so concentrated, and why they landed when and where they did. But neither the enormity of the flight nor the pre-dawn position of the apex of the wedge of the maritime tropical air in which the birds were flying could have been predicted from the weather bureau forecasts. In fact, the forecast map pictured the cold front as already far out to sea by 7 o'clock the previous evening and with northerly rather than southerly winds blowing throughout the entire area in which the flight originated; according to that forecast the birds would not even have taken to the air.

However, since the flight did occur, it is interesting to piece together the information at hand, explain it as best we can, and hope that this discussion will stimulate observers to watch weather maps more closely and to be aware of the conditions that may possibly result in a major landfall of migrants in future years.

Maps 1, 2, and 3 summarize conditions shown on the U.S. Weather Bureau's Surface Weather Maps for April 26, 1965 at 1 a.m. and 1 p.m.,



Map 1. Surface Weather at 1 a.m., April 26, 1965



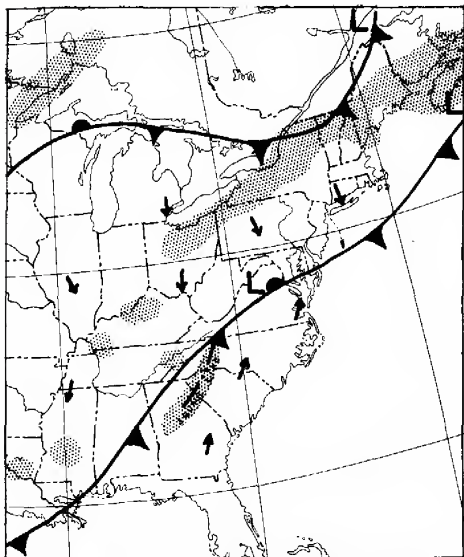
Map 2. Surface Weather at 1 p.m., April 26, 1965

E.S.T. and April 27 at 1 a.m. Arrows show approximate wind direction, shading designates precipitation areas, and the letter L marks the center of a low pressure area.

As background for our story, there was a good northward flight of birds over the Carolinas and southern Virginia on the night of April 23. This flight did not reach Maryland because a stationary front (separating warm air on the south from cold air on the north) formed a barrier across the State of Virginia; the flight did, however, put the migrants into position for the next lap of their journey. Cold air and northerly winds engulfed the entire Northeast, south into North Carolina, on April 24, and cold easterly winds with rain characterized the weather over Maryland, Virginia, and the Carolinas the following night. Our weather map for 1 a.m. on April 26 shows rain, drizzle, and fog still persisting throughout the area of interest. Thus, for three consecutive nights weather had not been suitable for migration.

By 1 p.m. on the 26th, the coastal Low had drifted northward, rain clouds were dissipating, temperatures in Virginia were 25 to 30 degrees warmer than on the previous day, and a light southerly windflow had become established through the Carolinas and Virginia. Conditions were ideal for migration in the area between the approaching cold front and the Carolina-Virginia coast; but to the west and north of the cold front winds were from the north, skies were overcast, and temperatures were considerably lower.

We can picture millions of birds becoming airborne over the Carolinas and Virginias shortly after dark on April 26. From their probable flight altitude, some 2,000 to 4,000 feet above the ground they



Map 3. Surface Weather at 1 a.m., April 27, 1965

could, before many hours, detect thunder showers along the approaching squall line that preceded the cold front. The front moved slowly enough that the birds could turn slightly toward the east and keep ahead of it--which they undoubtedly did. Map 3 shows the position of this front at 1 a.m. EST (2 a.m. EDT) on the 27th. By this time, birds were being squeezed into the ever-decreasing space between the ocean and the approaching cold front, and countless thousands must already have been preparing to alight along the Maryland coast. Others, under cover of darkness, flew out over the ocean, only to fight their way back to land after daylight arrived. As late as 11:30 a.m. birds were still arriving at Ocean City from over the open ocean and according to Carroll, Devlin and Miller, were perching on jetties, on the beach, and on buildings.

Fred Sibley independently noted enormous numbers of birds around the Hastings Hotel, but was not aware of the full extent of the invasion.

By great good fortune, Edwin J. Fellows, who is 2nd Mate of the S/S. ESSO NEW YORK, and an active observer for the Bureau of Sport Fisheries and Wildlife, was steaming southward off our coast at the very time the flight was taking place; the approximate position of his tanker is shown on the weather maps. Thick fog, which he encountered at 7 p.m., still obscured visibility when he returned to duty at 4 a.m. on the 27th. He heard many birds about the ship at 4 a.m., but could not see them until daylight. To quote from his report, "I don't think I have seen as many birds on a ship before...The best we could estimate was from 150 to 175 birds on the ship, mostly sparrows...I counted 23 Cape May Warblers, all dead, and others were reported--about 2 dozen more. Since they were found at daylight, all dead, I assumed that they were the ones that were hitting the pilot house in the dark reported by crew members before midnight and died as a result of it."

Although the numbers of individuals reported by Mr. Fellows were very small compared with those seen on shore, his observations are very significant. He recognized that a flight of extraordinary proportions was taking place. He showed that large numbers of birds were far off-shore even before midnight. And the more common species at sea were, in general, the same ones that were most common at Ocean City. In addition to the Cape May Warblers, which were not sighted in unusual numbers on shore, Mr. Fellows estimated 6 dozen White-throated Sparrows, 3 dozen towhees, a number of Savannah Sparrows (total not stated because of possible confusion with other species of sparrows), and 5 Brown Thrashers.

The exhausted state of some of the birds (reported also by the Ocean City observers) is illustrated by the statement that most of those birds that alighted on the ship stayed aboard until they either died or were near land. Of the 5 thrashers, 2 left the first day, one went ashore in the Bahamas on the 29th, and 2 rode to Louisiana. Most of the sparrows and towhees died the third or fourth day, despite the fact that food and water had been provided. Two of the White-throats made the round trip to Portsmouth, New Hampshire, but Mr. Fellows didn't know whether they "went ashore or signed on for another trip."

While we can reconstruct part of the Ocean City story, one important question remains unanswered: How many thousands--or millions--of migrants flew out over the ocean and failed to return safely to land? Since winds were relatively light we like to believe that most birds were able to reach shore. On the other hand, we know that many of the birds had flown to the limit of their endurance. Mr. Fellows remarked that some of the towhees that tried to leave the ship fell into the waves 800 feet away and were promptly devoured by Laughing Gulls. The strange lack of warblers at Ocean City coupled with the dead Cape Mays on ship-board suggests the possibility that mortality may have been much higher among warblers than among the heavier sparrows and thrushes. Only the Black-and-white and the Yellowthroat were mentioned as being more common than usual in the Ocean City area.

Turning our attention to the State as a whole, we find that April migrants in general were late because of low temperatures and slow development of vegetation and of insects. A return to warm weather in early May telescoped leaf growth and passerine migration into a very short period. By early June there were even fewer migrants remaining than usual. Precipitation was deficient in all three months, resulting in a gradual intensification of the drought.

To many observers the migration was dull because of a lack of well-defined migratory waves. Conditions for migration tended to be favorable for two or three days at a time and many transients filtered through unnoticed. Almost all observers missed seeing some species that they usually find each spring.

Tables 1 and 2 contain a summary of the earliest arrival and departure dates reported from various Maryland counties and the District of Columbia. Only those counties and those species that are best represented in the reports are included in the tables. The counties are arranged from northwest to southeast in order to show which species arrived at about the same time in all counties and which arrived earliest in the southeastern counties. The tables are truly a cooperative project in that they summarize the field work of more than two hundred people. Thanks are expressed to everyone who submitted records, and especially to Dr. Robert L. Pyle, field note editor of the Atlantic Naturalist, who made available for use in the tables many Maryland and District records from members of the Audubon Naturalist Society. Special thanks also are extended to Mrs. Alicia Knotts, Mr. Don Meritt, and Mr. Edward Mendinhall for their fine compilations of Caroline, Talbot and Kent County records.

The great majority of the dates in the tables (other than May 1 data from the Statewide Bird Count) are from observations by the following members: Western Md. (Garrett, Allegany, Washington, and Frederick Counties)--Carl W. Carlson, Anderson J. Martin, John W. Richards; Baltimore City and County--Mrs. Richard D. Cole, Mrs. Robert E. Kaestner, Mrs. Carl Lubbert, Mrs. Joshua Rowe; Howard County--Mrs. Harry B. Rauth, Mrs. George Munro, Morris Collins, Glenn Austin, Chandler S. Robbins; Montgomery County: Robert W. Warfield, Mrs. James Cooley, Mr. and Mrs. Harry Hogan, Mr. and Mrs. Herbert Douglas; District of Columbia--Dr. and Mrs. Robert L. Pyle, Billie H. Ruch, T.P. Ginn; Prince Georges County--Chandler and George Robbins, Paul and Danny Bystrak, Ted Van Velzen, Mr. and Mrs. David Bridge, Jesse Mason, Mr. and Mrs. Herbert Douglas; Anne Arundel--Paul and Danny Bystrak, William Anderson, Professor and Mrs. David Howard, Harold Wierenga; Queen Annes & Kent--Mr. and Mrs. Edward Mendinhall, William Friedberg, Jim Terry, Marcia Lakeman; Caroline--Marvin W. Hewitt, Mr. and Mrs. A.J. Fletcher, Mrs. Aldridge Pepper, Bobby Pepper, Alicia Knotts; Talbot--Don Meritt, Jan Reese; Lower Eastern Shore (Worcester and Wicomico Counties)--Mel Garland, Samuel H. Dyke, Mrs. Richard D. Cole, Marcia Lakeman. The letter "W" indicates that spring arrivals could not be separated from winter residents. A dash means the species was recorded but not on a significant arrival or departure date; "O" means there was no record for the county during the migration period.

Shearwaters. In the spring of 1964 the Sooty Shearwater was added to the Maryland list on the basis of three observations at Ocean City, May 30 to June 5 (maximum 12 birds). On May 8, 1965 Ted Van Velzen spotted an early individual of this pelagic species off Assateague Island. On May 16 Dr. H.M. Johnson and party saw 70 Sooties from the Ocean City beach, and on May 22 Carl Carlson saw 7 from Assateague Island. Although the Sooty Shearwater passes the Maryland coast in large numbers each spring, enroute northward from its breeding grounds in the South Atlantic to its wintering area in the North Atlantic, it is generally too far at sea to be seen from the shores of any of the Atlantic coastal states.

Egrets and Ibis. In contrast to most of the heron tribe, which wander north after the breeding season, Cattle Egrets and Glossy Ibis are more frequently found north and west of their breeding colonies in spring than they are in fall. Cattle Egrets have now become common enough so they can be expected as regular spring visitors in the coastal plain and piedmont counties. Mr. and Mrs. Mendinhall broke the record for abundance when they saw 150 in Kent County on May 6. Glossy Ibis also are continuing to increase along the coast, and once again there were a few inland records: April 11 at Galesville (Gretchen and Virginia Seielstad), April 22 at the Patuxent Research Center (Ted Van Velzen), and 7 over Annapolis on May 5 (Harold Wierenga). As many as 69 Glossy Ibis were counted in one field at Ocean City on April 11 by Carl Carlson. Robert Warfield found a Snow Egret on April 18 as far inland as Sycamore Landing in southern Montgomery County.

Swans and Ducks. The peak flight of Whistling Swans past Churchton

Table 1. Spring Arrival Dates, 1965

Species	Median					Counties											
	1961	1962	1963	1964	1965	W.Ma	Balt	Howd	Mont	D.C.	Pr.G	Anne	K&QA	Caro	Talb	LES	
Common Loon	--	--	4/13	4/4	5/1	5/1	5/1	5/1	4/9	--	4/21	4/12	5/1	0	5/1	W	
Green Heron	4/25	4/22	4/25	4/24	4/26	--	5/4	5/5	4/17	--	--	4/21	4/22	5/1	--	--	
Cattle Egret	--	5/1	--	--	5/6	5/25	0	0	0	0	5/6	0	5/6	0	4/7	5/8	
Snowy Egret	--	--	--	--	--	0	0	0	4/18	0	0	4/11	5/1	0	0	4/3	
American Bittern	--	--	--	--	--	--	3/20	0	4/29	0	--	4/24	0	0	0	4/11	
Wood Duck	3/15	3/17	--	3/10	3/31	--	4/4	3/31	3/7	--	4/11	--	--	--	3/7	W	
Broad-winged Hawk	4/26	4/22	4/17	4/18	4/21	5/1	4/14	0	4/17	0	4/21	5/1	0	0	0	--	
Osprey	3/15	3/18	3/21	3/29	4/4	4/10	4/20	4/18	4/10	4/10	3/30	3/13	3/28	3/22	3/16	4/11	
Killdeer	2/26	3/14	3/9	3/6	--	--	--	--	2/21	--	--	2/12	3/28	--	2/25	W	
American Woodcock	2/20	3/20	3/7	--	3/6	3/4	--	2/19	3/21	3/19	3/9	2/17	0	3/23	2/18	W	
Spotted Sandpiper	5/2	4/30	4/24	5/2	5/1	4/20	4/27	4/14	4/17	--	5/1	5/1	5/1	5/1	5/1	--	
Solitary Sandpiper	5/6	5/2	5/2	5/2	5/1	5/1	5/4	0	4/17	--	--	4/30	5/1	5/1	5/1	5/8	
Greater Yellowlegs	4/12	--	3/29	4/1	4/8	5/12	--	0	3/27	--	--	3/24	4/24	4/24	4/8	3/27	
Lesser Yellowlegs	--	--	5/2	4/16	4/27	5/1	5/1	0	3/21	--	--	4/27	4/21	5/1	0	4/11	
Yellow-billed Cuckoo	5/6	5/2	5/4	5/9	5/5	5/1	5/1	5/10	5/2	6/23	5/9	0	5/1	4/30	5/27	5/8	
Black-billed Cuckoo	5/6	5/5	5/4	5/12	5/3	5/1	0	5/6	5/8	0	5/3	5/1	0	0	0	0	
Chuck-will's-widow	4/26	4/28	5/3	4/19	--	0	0	0	0	0	0	5/20	0	5/1	5/1	5/7	
Whip-poor-will	4/23	4/25	4/18	4/21	4/18	4/23	--	4/15	--	0	4/14	4/15	--	4/21	--	4/25	
Common Nighthawk	5/8	5/8	5/8	5/9	5/1	5/1	--	5/9	5/1	--	5/1	0	0	5/1	0	0	
Chimney Swift	4/20	4/20	4/14	4/14	4/16	4/12	4/20	4/18	4/11	4/12	4/21	4/14	--	4/19	--	--	
Ruby-thr. Hummingbird	4/28	5/2	4/29	5/2	4/26	4/29	5/11	4/26	4/24	--	4/21	4/26	4/21	4/21	5/1	4/25	
Eastern Kingbird	4/25	4/27	4/26	4/26	4/26	4/30	4/25	4/28	4/27	--	4/30	4/22	4/18	4/26	5/1	--	
Gt. Crested Flycatcher	4/26	5/2	4/26	4/26	5/1	5/1	5/1	5/1	4/24	5/2	4/25	4/23	5/1	4/26	5/1	4/25	
Eastern Phoebe	3/14	3/26	3/16	3/22	3/28	3/28	3/28	3/24	3/14	4/4	3/30	3/28	3/28	3/24	3/21	4/11	
Acadian Flycatcher	5/6	5/5	5/4	5/2	5/1	5/2	5/5	5/1	4/30	5/5	5/1	5/1	--	4/30	--	5/8	
Eastern Wood Pewee	5/6	5/5	5/4	5/2	5/6	5/9	5/12	5/3	5/4	5/16	5/1	5/15	5/1	5/1	--	5/9	
Tree Swallow	4/1	3/30	3/28	3/27	3/29	4/4	--	0	4/10	--	3/30	3/28	3/28	3/28	3/28	4/11	
Rough-winged Swallow	4/8	4/20	4/12	4/16	4/11	4/10	4/14	--	--	--	4/2	4/11	--	--	--	4/23	
Barn Swallow	4/5	4/4	4/13	4/7	4/10	4/4	4/20	4/10	4/3	4/21	4/6	4/17	--	4/13	3/28	4/11	
Purple Martin	4/4	3/27	3/25	3/26	4/4	4/4	--	--	4/28	--	3/22	4/4	4/9	3/17	4/13	--	
Blue Jay	4/25	4/27	4/24	4/28	5/1	--	5/1	5/1	4/26	--	--	4/22	5/1	5/1	--	--	
House Wren	4/24	4/26	4/20	4/21	4/26	4/29	4/24	4/27	--	4/27	4/21	4/17	--	--	--	--	
Catbird	4/27	4/27	4/27	4/24	4/27	4/30	4/24	4/22	4/28	4/27	5/1	4/24	4/27	4/21	5/1	4/23	
Brown Thrasher	3/31	4/4	4/7	4/10	4/11	4/10	4/12	4/10	4/14	4/27	4/5	4/11	4/11	4/9	3/28	4/11	
Robin	3/3	2/14	3/6	2/14	3/19	--	3/14	--	3/21	3/19	4/4	2/22	W	2/26	3/21	W	
Wood Thrush	4/25	4/26	4/21	4/25	4/23	4/26	4/28	4/28	4/18	4/27	4/22	4/21	--	4/17	--	4/23	
Hermit Thrush	--	--	4/12	4/14	4/20	--	4/20	0	--	4/22	4/5	4/8	0	4/29	W	W	
Swainson's Thrush	5/6	5/5	5/10	5/8	5/10	--	5/1	0	5/1	5/16	5/16	5/4	0	5/18	0	0	
Gray-cheeked Thrush	--	--	5/10	5/12	--	5/1	--	0	5/1	0	--	5/1	0	--	0	5/8	
Veery	5/6	5/2	5/4	5/2	5/1	5/1	5/1	4/29	5/1	5/5	5/1	5/1	0	4/29	5/1	5/8	
Blue-gray Gnatcatcher	4/15	--	--	4/12	4/15	0	4/20	4/20	4/9	--	4/15	4/14	--	4/12	--	4/23	
Ruby-crowned Kinglet	--	--	4/13	4/11	4/12	4/18	4/12	4/10	4/11	4/27	4/11	4/4	4/24	--	W	W	
Cedar Waxwing	5/6	--	--	5/2	4/27	4/27	3/25	4/6	5/1	4/27	5/3	5/1	--	3/14	W	W	
White-eyed Vireo	4/24	4/26	4/22	4/18	4/23	0	4/24	4/21	4/30	--	5/1	4/20	--	4/16	--	4/23	
Yellow-throated Vireo	4/28	4/28	5/4	4/26	4/25	5/1	5/4	5/1	4/24	5/2	4/25	4/23	--	4/28	--	4/23	
Solitary Vireo	4/27	5/5	4/23	4/25	5/1	5/1	4/21	0	5/1	5/2	5/1	4/20	5/1	4/27	0	--	

Red-eyed Vireo	4/28	4/29	4/28	4/26	5/1	4/29	5/1	5/3	4/24	5/2	4/25	4/30	5/1	5/1	5/1	--
Warbling Vireo	--	--	5/2	5/2	5/1	5/1	5/11	0	4/25	0	0	0	5/1	5/1	0	0
Black-and-white Warbler	4/26	4/26	4/23	4/20	4/21	4/29	4/21	4/28	4/25	5/2	4/15	4/18	--	4/17	--	4/11
Prothonotary Warbler	4/29	4/28	4/25	4/23	4/23	5/1	5/4	0	4/18	--	4/16	4/30	0	4/16	--	4/23
Worm-eating Warbler	5/6	5/5	5/3	5/2	5/1	5/1	5/1	5/1	4/30	0	5/1	5/1	0	5/1	5/1	4/23
Golden-winged Warbler	--	--	--	--	--	5/9	0	0	5/6	0	5/6	5/1	0	--	0	0
Blue-winged Warbler	5/6	5/5	5/4	5/2	5/1	5/1	4/23	5/1	0	5/2	5/1	5/1	5/2	4/27	5/1	5/8
Tennessee Warbler	--	--	5/11	--	--	--	5/8	0	5/4	0	5/4	5/13	0	0	0	0
Nashville Warbler	--	--	4/29	--	5/1	5/1	0	5/1	4/25	0	5/1	5/1	0	--	0	--
Parula Warbler	4/25	4/28	4/26	4/18	4/25	5/1	4/25	5/1	4/18	4/27	4/20	4/21	--	4/27	--	4/23
Yellow Warbler	4/29	4/29	4/30	4/28	5/1	5/1	4/24	5/1	4/25	4/30	5/1	5/1	5/1	4/26	--	--
Magnolia Warbler	5/7	5/5	5/4	5/6	5/2	5/1	5/1	5/5	5/1	5/5	5/1	5/2	5/1	5/3	0	5/8
Cape May Warbler	5/7	5/5	5/4	--	5/7	5/9	0	0	5/5	5/1	5/3	5/12	0	5/11	0	0
Black-thr. Blue Warbler	5/6	5/5	5/4	5/2	5/1	5/1	5/1	0	4/25	5/1	5/1	5/1	0	5/1	5/1	5/8
Myrtle Warbler	3/20	4/14	--	4/25	4/11	--	4/10	4/26	4/3	--	3/30	4/11	4/11	4/18	W	W
Black-thr. Green Warbler	5/6	4/30	5/4	5/2	5/1	5/1	4/28	5/1	4/24	--	5/1	5/1	5/1	--	0	--
Cerulean Warbler	5/6	5/2	5/4	5/2	5/2	5/1	0	5/1	4/30	0	5/1	0	0	0	5/2	5/8
Blackburnian Warbler	5/6	5/5	5/4	5/8	5/1	--	5/1	5/8	5/1	5/2	--	5/1	4/28	0	0	5/8
Chestnut-sided Warbler	5/6	5/5	5/4	5/4	5/1	5/1	5/1	5/1	5/1	5/1	4/28	5/1	5/1	4/27	5/1	5/8
Bay-breasted Warbler	--	--	5/12	--	5/8	5/9	0	5/6	0	0	5/8	5/5	0	5/9	0	0
Blackpoll Warbler	5/8	5/5	5/8	5/11	5/8	5/12	5/12	5/10	5/4	5/12	5/6	5/4	0	5/7	0	5/8
Pine Warbler	3/15	3/31	3/20	--	4/3	4/1	0	0	0	--	--	4/3	3/23	4/9	4/11	
Prairie Warbler	4/25	4/26	4/30	4/23	4/24	5/1	5/1	4/22	4/30	5/2	4/22	4/22	--	4/26	4/9	4/23
Palm Warbler	--	--	5/7	4/25	4/18	0	4/20	4/17	4/7	0	4/12	4/18	--	4/12	--	--
Ovenbird	5/3	4/28	4/30	4/21	4/25	4/30	4/25	4/22	5/1	4/27	4/20	4/20	5/1	4/22	5/1	4/23
Northern Waterthrush	4/26	5/5	5/4	5/2	5/1	5/1	5/1	5/1	4/30	0	5/1	4/30	5/1	4/29	5/1	--
Louisiana Waterthrush	4/16	--	4/3	4/11	4/15	4/28	4/27	4/5	4/9	3/28	4/15	4/4	--	4/17	--	4/23
Kentucky Warbler	5/4	5/1	5/4	5/2	5/1	--	5/1	5/1	5/1	--	5/1	5/1	--	4/22	5/1	5/8
Yellowthroat	4/24	4/28	4/21	4/19	4/22	4/21	4/24	4/19	4/24	5/5	4/20	4/18	4/24	4/16	--	4/23
Yellow-breasted Chat	4/30	5/4	5/4	5/2	5/1	5/1	5/1	5/1	4/30	5/5	5/1	4/30	5/1	5/1	--	4/23
Hooded Warbler	5/4	4/26	4/28	4/25	5/1	--	4/25	5/1	5/1	5/1	4/22	4/22	0	5/1	--	--
Wilson's Warbler	--	--	5/14	5/12	--	5/9	5/18	0	5/5	0	5/6	--	0	--	0	0
Canada Warbler	5/7	5/8	5/4	5/6	5/3	--	5/5	5/5	5/3	5/1	5/1	5/1	0	5/9	--	0
American Redstart	4/30	4/29	4/30	4/29	4/25	--	4/25	5/1	4/24	5/5	4/25	4/22	5/1	5/1	--	4/23
Bobolink	5/6	5/5	5/11	5/2	5/1	5/1	--	5/12	5/12	0	4/28	--	5/1	--	0	--
Red-winged Blackbird	2/21	2/24	3/3	3/3	--	2/28	2/18	--	2/13	--	--	2/13	W	W	W	W
Orchard Oriole	4/26	5/4	5/2	4/26	5/1	5/1	0	5/1	4/19	0	4/25	4/22	5/1	4/19	5/1	5/8
Baltimore Oriole	4/28	5/1	4/28	5/2	5/1	4/29	4/27	5/1	4/24	5/2	5/1	4/27	5/1	4/28	5/1	5/8
Common Grackle	2/22	2/24	2/28	3/5	2/28	--	--	--	2/28	3/11	3/20	2/21	W	W	2/21	W
Scarlet Tanager	4/26	4/30	5/1	4/27	5/1	5/1	5/1	4/28	4/22	5/5	4/22	4/21	5/6	4/24	5/1	5/8
Summer Tanager	5/6	5/5	5/3	5/2	5/1	0	0	0	4/24	0	5/8	5/1	5/2	4/29	5/1	0
Purple Finch	--	--	--	4/12	--	4/9	W	4/5	3/7	2/26	W	--	--	--	--	--
Rose-breasted Grosbeak	5/6	5/5	5/4	5/2	5/1	5/1	4/28	4/27	5/1	5/5	4/27	5/1	5/1	4/28	5/1	5/8
Blue Grosbeak	4/30	5/2	4/28	4/30	5/4	0	5/12	5/28	5/13	0	4/30	4/30	5/1	5/1	--	5/8
Indigo Bunting	4/30	5/1	5/4	5/2	5/1	5/1	5/8	5/1	5/1	5/1	5/1	5/1	5/2	5/1	5/1	--
Rufous-sided Towhee	3/20	--	3/26	3/22	--	3/24	3/14	3/20	3/24	--	--	--	W	W	W	W
Savannah Sparrow	--	--	--	--	--	4/4	4/13	--	3/21	0	--	3/28	--	--	--	--
Grasshopper Sparrow	4/30	4/28	5/4	5/2	5/1	4/18	5/1	5/1	5/1	0	5/1	5/1	4/24	5/1	5/1	--
Vesper Sparrow	3/30	--	3/29	3/30	4/8	4/4	--	--	3/21	4/22	4/11	3/31	--	--	--	4/11
Chipping Sparrow	3/28	3/31	3/28	4/3	--	--	--	3/29	--	--	--	4/3	--	3/16	--	4/23
White-crowned Sparrow	5/6	5/5	--	5/2	5/1	5/1	5/1	5/1	4/28	0	0	4/21	5/1	--	5/1	--

Table 2. Spring Departure Dates, 1965

Species	W.Md	Balt	Howd	Mont	Pr.G	Anne	K&QA	Caro	Talb	LES
Common Loon	--	--	--	5/ 9	5/ 8	--	5/ 1	0	5/16	5/ 9
Whistling Swan	--	4/27	--	5/ 1	5/ 1	5/ 1	5/ 1	5/ 1	5/16	4/ 3
Canada Goose	--	5/ 1	--	4/11	5/ 1	5/ 1	5/12	5/ 1	5/ 1	5/ 9
Common Snipe	5/ 1	5/ 1	0	5/ 1	--	5/ 1	5/ 1	5/ 1	5/ 1	5/ 9
Yellow-bellied Sapsucker	4/18	--	4/27	4/24	4/11	4/18	--	5/ 1	--	--
Brown Creeper	5/ 1	5/ 1	--	5/ 8	5/ 1	4/24	5/ 1	--	--	--
Winter Wren	5/ 1	5/ 1	--	4/17	--	5/ 1	--	--	--	4/23
Swainson's Thrush	5/15	5/31	--	--	6/ 4	--	0	5/18	0	0
Hermit Thrush	5/ 1	5/ 1	5/ 1	5/ 1	5/ 1	5/ 1	5/ 1	5/ 2	5/ 1	5/ 9
Golden-crowned Kinglet	--	--	--	4/10	4/11	4/18	4/ 3	4/13	--	4/11
Ruby-crowned Kinglet	5/ 1	5/ 1	5/ 9	5/ 6	5/ 8	5/ 2	5/ 1	5/ 1	--	5/ 9
Water Pipit	5/ 1	0	5/ 1	5/ 1	0	0	5/ 1	--	5/ 1	--
Cape May Warbler	--	0	0	5/ 8	5/14	5/12	0	5/11	0	0
Magnolia Warbler	5/15	--	--	5/ 9	5/13	5/16	--	5/23	0	5/ 9
Black-thr. Blue Warbler	5/15	--	0	5/ 9	5/14	--	0	--	--	5/ 9
Myrtle Warbler	--	--	--	5/13	5/15	5/ 5	--	5/ 8	--	5/ 9
Blackpoll Warbler	5/31	5/29	5/26	5/23	5/27	5/29	0	5/26	0	--
Bay-breasted Warbler	--	0	--	5/15	5/14	--	0	5/14	0	0
Chestnut-sided Warbler	--	5/22	--	5/ 9	5/14	5/13	--	--	--	5/ 9
Palm Warbler	0	5/ 1	5/ 1	5/ 6	--	5/24	5/ 1	5/ 7	--	--
Northern Waterthrush	--	5/22	--	5/16	6/ 4	5/22	--	5/25	--	5/ 9
Wilson's Warbler	--	5/31	0	--	5/21	5/18	0	5/21	0	0
Canada Warbler	5/17	--	--	5/23	6/ 2	5/13	0	5/26	5/15	0
American Redstart	--	--	--	--	6/ 4	5/27	--	5/28	--	--
Bobolink	--	--	6/ 7	--	6/ 4	--	--	5/21	0	--
Rusty Blackbird	5/ 1	4/25	5/ 1	5/ 4	5/ 1	5/ 1	5/ 1	5/ 1	5/ 1	--
Rose-breasted Grosbeak	5/15	--	--	5/ 9	5/14	--	--	5/15	--	5/ 9
Purple Finch	5/ 1	--	5/ 1	5/ 1	5/ 1	5/ 1	5/ 1	5/ 1	--	--
Slate-colored Junco	5/ 1	5/ 1	5/ 5	5/ 8	5/ 3	5/ 1	5/ 1	5/ 1	5/ 1	--
White-crowned Sparrow	5/12	--	--	5/13	0	--	--	5/ 3	--	5/ 8
White-throated Sparrow	5/15	6/ 3	5/ 9	5/10	5/ 8	5/13	--	5/15	--	5/ 9
Fox Sparrow	--	--	4/27	4/ 4	--	4/24	--	--	--	--
Swamp Sparrow	5/ 9	5/ 1	5/ 1	5/ 4	5/31	5/ 5	5/ 1	5/ 1	5/ 2	5/ 9

occurred on March 28, when 2100 were counted by Friel Sanders. Late waterfowl observations included 3 Lesser Scaup, a Ruddy Duck and 30 Red-breasted Mergansers in Sinepuxent Bay on May 8 (Jan Reese and party), a Bufflehead at the Assateague Island Bridge on May 9 (Rodney Jones), 2 Oldsquaws in Talbot County on May 16 (Reese and Don Meritt) and 3 male Surf Scoters at Ocean City on June 1 and a male Harlequin Duck at Ocean City Inlet on April 11 (both by Marcia Lakeman and Marcia Nelson).

Shorebirds. American Oystercatchers (2) were first noted at Ocean City on April 3 (Jesse Mason). The next non-wintering species of shorebird at Ocean City was a Willet on April 11 (Misses Lakeman and Nelson), tying the 1959 record. At the opposite end of the State, George A. Hall observed a Willet at Herrington Manor in Garrett County on May 9; this appears to be the first record for that county. Purple Sandpipers continue to increase in the only area in Maryland where they occur regularly--jetties and rocks in the vicinity of Ocean City Inlet; 93 on April 11 (Marcia Lakeman) and 94 on May 8 (MOS Convention) were new high spring counts for the State, and the first June record was obtained when a straggler was found on June 1 (Misses Lakeman and Nelson).

Gulls. An immature Black-headed Gull was discovered in a flock of 50 Bonaparte's Gulls at Ocean City on April 2 by Jesse Mason, who showed it to Samuel Dyke on April 4. Dyke in return, showed Mason an immature Little Gull there on the same day. As many as 100 Bonaparte's Gulls were seen over the Potomac River at Seneca on April 17 by Warfield, who also identified 9 over his Germantown home two days later.

Cuckoos. These unpredictable birds were very scarce in May and were not heard by some observers until after the middle of June. Note that only 2 Black-bills and 7 Yellow-bills were found on the May 1 counts. On the Breeding Bird Survey, routes covered from June 1 to June 25 had an average of 0.6 Yellow-bills per 50-stop route, whereas routes covered from June 26 to July 10 recorded an average of 2.1 per route. It is quite evident that there was a marked influx during the last week of June.

Warblers. Although all the warbler species that we expect during the spring migration were reported and there were several records of local interest, no migration dates for the State were exceeded, nor were any new high counts obtained. Perhaps the most interesting reports were of 2 Yellow-throated Warblers along the lower Monacacy River in Frederick County on May 1 (Edwin T. McKnight) and a Cerulean Warbler singing in the Pocomoke Swamp near Whaleysville on May 8 (Robbins and others). If breeding of either species could be confirmed in these areas it would represent an extension of range.

Sparrows. The Harris' Sparrow that wintered at Earl Baysinger's feeding station near Clarksville was last seen on April 27; Mrs. Herbert Church's bird, which wintered a few hundred yards south of the Maryland line near Ashburn, Virginia, remained until May 1. Another Harris' Sparrow was studied at Denton on May 2 (Mrs. Aldridge Pepper)--the first Eastern Shore record.

Fall Flight Forecast. Because there is a very poor cone crop on spruce and fir trees in northern New England, we anticipate a heavy southward movement of Red-breasted Nuthatches, northern finches and other irregular northern visitors.

Migratory Bird Populations Station,
Laurel

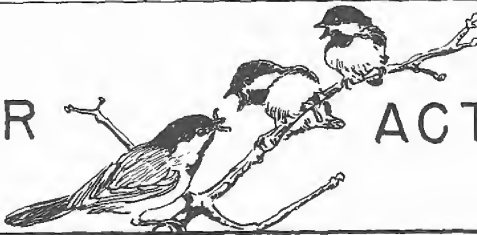
An Exhibit of American Bird Carvings

An outstanding collection of carvings of shore birds, game-birds and waterfowl by leading U. S. carvers from Maine to California, will be open to the public Thursday and Friday, Nov. 4-5 from 2 p.m. to 10 p.m. and on Saturday, Nov. 6, from 10 a.m. to 5 p.m. at the Parish House of Emmanuel P. E. Church, Cross & High Streets, Chestertown, Md.

The Kent County Chapter is sponsoring these exhibits under the direction of Program Chairman, Dr. Daniel Z. Gibson, President of Washington College. Profits will go to the M. O. S. Investment Fund for Wildlife Sanctuaries. Admission is \$1.00 for adults, 50¢ for children.

The carving exhibits will be highlighted by many special features, among them demonstrations of carving craft, a display of antique waterfowl decoys, and a collection of books on carving and birds with an autographing session by authors.

JUNIOR ACTIVITIES



NATURE CAMP at CAREY RUN

As education is one of the stated purposes for M. O. S. maintaining sanctuaries, it was decided that Carey Run had great potential for small groups of campers to discover, observe and study the wonders of nature. Thus began two one-week sessions of nature camp at our western Maryland Sanctuary.

The first camping experience was for eight boys from Allegany, Anne Arundel, Baltimore and Garrett Counties. Ten girls from Allegany, Anne Arundel, Garrett Counties and Mineral County, West Virginia, filled the roster for the second week's activities.

Each child participated in classes planned to study the plant and animal life of the 52.3 acres of the sanctuary. Early morning and late evening bird walks gave us a camp list of 50 birds. Each camper observed at least 25 species and knew something about every bird on his or her list. Color, size, shape, song, flight and habitat were all employed for making identification. In addition, fifteen categories other than birds, and in groups of five, such as five ferns, mammals, insects, etc. made each child eligible for a certificate in the 25/75 club. Everyone made it.



"Cook-out"



"Shelter Building"

An extensive library made it possible to look it up as soon as one returned from an observation trip and books often went into the field to satisfy the desire to know. It might have been a Red-bellied Snake (Storeria occipitomaculata) for one, a Large Coral Root orchid (Corallorrhiza maculata) for another. Individual interests led in many directions resulting in a wealth of information for the group through sharing.

Two trails were laid out and labels were made for many plants that the campers had learned to identify. Books helped to point out the variety of common names, establishing understanding for the need of scientific names which were included on each label.

In addition, each session worked on an improvement project for the sanctuary. The boys chose to help convert the foundation of the old barn into a usable shelter. The girls helped to clean-up by stacking old lumber, raking and piling trash and then built a retaining wall for an island of evergreens and berry-bearing bushes.

There was still time for camp fire each night, cook-outs, group singing and sleeping under the stars on the highest hill of the Sanctuary.

Activity requires fuel and in checking to see if everyone was getting enough to eat, one camper replied, "Oh, sometimes almost too much."

We had two wonderful weeks. We want to do it again next year!

Billie Taylor
Mel Garland

JUNIOR PROGRAM 1965-66

The bird walks and natural science talks for young people sponsored by the Baltimore Chapter of the Maryland Ornithological Society will be held at Cylburn Park on the following dates during the 1965-66 season. All young people of school age are welcome.

- Sept. 25 BIRD WALK - 8 to 9 a.m. SHELLS, Mrs. Anthony Perlman - 9 A.M.
Bring your summer collection for identification.
- Oct. 9 BIRD WALK - 8 to 9 a.m. PENGUINS AND SKUAS IN THE ANTARCTIC,
Mr. Robert C. Wood of the Johns Hopkins University - 9 a.m.
- Oct. 23 BIRD WALK - 8 to 9 a.m. Unique BIRD FILMS and a demonstration
of BIRD SONG RECORDING EQUIPMENT, Professor and Mrs. David G.
Howard of Annapolis - 9 a.m.
- Nov. 6 BIRD BANDING DEMONSTRATION AND WALK - 8 to 9:30 and 9:30 to
11 a.m.
- Nov. 20 BIRD WALK - 8 to 9 a.m. Talk on MINERALS - 9 a.m.
- Dec. 4 BIRD WALK - 8 to 9 a.m. NATURE GAME with slides - 9 a.m.
- Dec. 18 BIRD WALK AND DECORATING THE BIRDS' CHRISTMAS TREE - 8-9:30 a.m.
Suggested decorations to bring: strings of popcorn, peanuts, net bags
of suet, etc.
- Jan. 15 BIRD WALK - 8 to 9 a.m. HOW TO STUDY ANTS, Mr. and Mrs. Lynn
Poole, authors of the book "Weird and Wonderful Ants" - 9 a.m.
- Jan. 29 BIRD WALK - 8 to 9 a.m. MARYLAND GEOLOGY, Miss Claire A.
Richardson of the U. S. Geological Survey. 9 a.m.

MENDINHALL PICNIC ENJOYED BY 108

Although threatening clouds and showers in the early morning curtailed the attendance, we had 108 who had registered present for lunch and after a slight shower they all moved out for the luncheon hour. Swimming was great. Many were taken for boat rides. Dr. Delario held the young and old spell-bound with his magic tricks. There was never a dull moment. From the many letters of appreciation, I think we can chalk up another good day at "Damsite".

Dorothy A. Mendinhall

RE M I N D E R S

Membership payments for the year September 1, 1965 through August 31, 1966 are due now. If you have delayed, please send your check to your Chapter Treasurer.

It is time to send in nest cards for the nests you found this summer. All records can be used, whether visited once or many times, whether successful or unsuccessful. Send completed cards or requests for additional cards to: David and Margaret Bridge, 12A Plateau Place, Greenbelt, Md. 20770.

This is the final call for County Bird Lists for 1964. If you have not sent a check list of birds seen last year in your County, please send it before October 15th to Hank Kaestner, 405 Hollen Road, Baltimore, Md. 21212.

COMING EVENTS

Montgomery Chapter meets 3rd Thursday of each month at 8 p.m. in Auditorium of Perpetual Building Association, 7401 Wisconsin Avenue, Bethesda, Md. Meetings followed by a field trip on Sunday, concentrating on the aspect of ornithology and/or conservation discussed previously.

Patuxent Bird Club meets on the 4th Tuesday of each month, except December, at Equitable Trust Company, 320 Main Street, Laurel, Md.

Programs were tentative or incomplete at press time from Chapters not listed in "Coming Events"

Sept. 10

ANNE ARUNDEL

Hawk Recognition lecture by Mr. David Smith
State Office Bldg. Assembly Room 8 p.m.

- Sept. 10 CAROLINE Monthly meeting
- Sept. 11 BALTIMORE Lake Roland for fall migrants 9 a.m.
- Sept. 11-12 ALLEGANY Work days at Carey Run Sanctuary
- Sept. 12 ALLEGANY Field trip 3 p.m. Chairman: Mrs. Richard Douglass
- Sept. 12 STATEWIDE Annual picnic at Capt. & Mrs. J. E. M. Wood's, 101 Old Crossing Road, Annapolis. Meet at Sandy Point Park 9 a.m. R.S.V.P. to Mrs. Wood for bean soup served at noon. 1:30 p.m. Executive Council meeting
- Sept. 12 BALTIMORE Twilight funneling of Chimney Swifts. Meet at Lake & Roland Aves. 6:45 p.m. Miss Grace Naumann, leader.
- Sept. 13 - Oct. 31 OPERATION RECOVERY at Ocean City, Md. (Mrs. Richard Cole, VA3-2650 or HA6-0190); at Kent Point (Mr. & Mrs. David Bridge 1-927-0834); at "Damsite", Chestertown (Mrs. Edward Mendin hall 1-778-0826).
- Sept. 16 MONTGOMERY Monthly meeting 8 p.m. Auditorium Perpetual Bldg. Ass'n, 7401 Wisconsin Ave. Bethesda. Topic: "Fall Migration in the Piedmont."
- Sept. 17 BALTIMORE Monthly meeting 8 p.m., Enoch Pratt Library. Speaker: Mr. Chandler S. Robbins, "Birds of Midway Island."
- Sept. 17 TALBOT Monthly meeting, Easton Library, 8 P.M.
- Sept. 18 BALTIMORE Loch Raven for shore birds and other migrants
- Sept. 19 MONTGOMERY Field trip to follow up discussion at Sept. 16th meeting.
- Sept. 24 - 26 New Jersey Audubon Society's autumn weekend at Cape May, New Jersey. Information: Mrs. William Gerringer, VA5-2175
- Sept. 25 ANNE ARUNDEL Quiet Waters Farm revisited. Meet at gate beside Hillesmere gate, Forrest Drive & Bay Ridge Ave., Annapolis 8 A.M.
- Sept. 26 TALBOT Breakfast hike. Meet 7 a.m. at St. Michaels High School
- Sept. 28 PATUXENT Monthly meeting 7:45 p.m. Equitable Trust Co. Bldg., 320 Main St., Laurel.
- Oct. 1-5 National Audubon Society's 61st Annual Convention at New Sheraton-Boston Hotel, Boston, Mass.
- Oct. 2 BALTIMORE Rock Run Sanctuary Hosts: Mr. & Mrs. H. G. Hackman. Leader: Mr. William Clark. Meet Korvette Parking area 7 a.m. or Rock Run Sanctuary any time
- Oct. 7 FREDERICK Monthly meeting
- Oct. 8 BALTIMORE Monthly meeting and annual dinner at Rodgers Forge Church, Stevenson Lane near Bellona Ave., Towson 6:30 p.m. \$2.00 Make reservations with Mrs. Robert Kaestner, DR7-8990 by October 1st. Speaker: Mrs. Bradley Fisk, "Bird Banding in the Dry Tortugas."

- Oct. 9 - 10 STATEWIDE Autumn weekend and Open State Board meeting at Carey Run Sanctuary, Garrett County.
Oct. 9. Bring sandwiches, Allegany Chapter will serve dessert and coffee. 1:30 p.m. trip from Carey Run for Finzel Swamp. Leader: Mrs. Daniel Folk. Oct. 10, 9 a.m. leave Carey Run for Swallow Falls. Leader: Mr. Joseph A. Minke. Meet at Finzel Road Bridge, Route 40.
- Oct. 9 ANNE ARUNDEL) Joint trip. Explore lower Patuxent valley.
PATUXENT) Meet 8:15 a.m. Holiday Inn, Md. 3 and U.S. 50.
Leaders: Mr. David Bridge and C. W. Hiatts.
- Oct. 10 TALBOT Breakfast hike 7 a.m. from St. Michaels High School
- Oct. 12 BALTIMORE Hawk Identification class. 8 p.m., Cylburn Mansion.
- Oct. 15 TALBOT Monthly meeting 8 p.m. Easton Library
- Oct. 16 - 17 BALTIMORE Hawk Mt. Sanctuary, Kempton, Pa. Make own motel reservations. Leaders: Mr. and Mrs. William Schneider, CL4-2095
- Oct. 17 TALBOT 7 a.m. Breakfast hike.
- Oct. 21 MONTGOMERY Monthly meeting 8 p.m. Hawk talk by Mr. Chandler S. Robbins
- Oct. 23 - 24 ANNE ARUNDEL Washington Monument State Park. Study hawks. 9 a.m. Leaders: The Frederick Jewetts 647-0907
- Oct. 24 BALTIMORE C. & O. Canal and Potomac River. Leaders: Mr. & Mrs. Gordon MacGregor and Dr. & Mrs. Wm. Gerringer. Meet Hutzler's Westview parking area 7:30 a.m.
- Oct. 24 MONTGOMERY Field trip
- Oct. 24 TALBOT Breakfast hike 7 a.m.
- Oct. 27 ALLEGANY Monthly meeting. Board of Education Bldg., 7:30 p.m. Speaker: Mr. Edwin M. Barry, Ass't. Director, Game & Inland Fish Comm.
- Oct. 26 PATUXENT Monthly meeting 7:45 p.m. Equitable Trust Co. building, Laurel.
- Nov. 4 FREDERICK Monthly meeting
- Nov. 4 - 6 KENT Exhibit of American Bird carvings, books, pictures. Emmanuel Episcopal Church.
- Nov. 5 ANNE ARUNDEL Duck Recognition lecture. Mr. Vernon Stotts. State Office Bldg. assembly room 8 p.m.
- Nov. 5 BALTIMORE Florence H. Burner Memorial Lecture by Dr. Charles J. Stine, Jr. "Land of the Drowned River". Auditorium to be announced. Tickets \$1.00, preferably in advance, from Mrs. Robert E. Kaestner. DR7-8990
- Nov. 7 TALBOT Work day at Mill Creek Sanctuary. 9 a.m. Bring lunch.

Nov. 12	<u>CAROLINE</u>	Monthly meeting
Nov. 12	<u>TALBOT</u>	Audubon Screen Tour. Walter J. Breckinridge "Island Treasure" 8 p.m. Mr. Pleasant School
Nov. 13	<u>BALTIMORE</u>	Prettyboy Lake area and "Possum Cove". Leader: Dr. Elizabeth Fisher HO7-0676. Meet Hutzler's Towson parking area 8 a.m.
Nov. 17	<u>ALLEGANY</u>	Dinner meeting at Cumberland Country Club. Chairman: Miss Nan Livingstone
Nov. 18	<u>MONTGOMERY</u>	Monthly meeting. Topic: "Wintering Water- fowl"
Nov. 19	<u>TALBOT</u>	Monthly meeting 8 p.m. at Library
Nov. 20	<u>ANNE ARUNDEL</u>	Blackwater National Wildlife Refuge and Fishing Bay Wildlife area. Meet 7:45 a.m. at Dutch Mill, Revell Highway. Leader: Miss Reida Longanecker
Nov. 20	<u>MONTGOMERY</u>	Field trip
Nov. 21	<u>BALTIMORE</u>	Remington Farms, Chestertown. Leader: Mrs. Richard Cole. VA3-2650 or HA6-0190. Meet Korvette Parking area (Perring Plaza, Beltway Exit 30) 7:30 a.m.
Nov. 23	<u>PATUXENT</u>	Monthly meeting 7:45 p.m.
Dec. 1	<u>KENT</u>	Monthly meeting. Arrangements and assign- ments for Christmas Counts.
Dec. 3	<u>BALTIMORE</u>	Monthly meeting 8 P.M., Pratt Library Speaker: Dr. Elizabeth Fisher, "Wild Flowers of Maryland."
Dec. 4	<u>ANNE ARUNDEL</u>	Birdwatchers' Trek. Fuhrman's, McGeady's and Foster's Farm. Breakfast 8 a.m. Leader: Mrs. Paul Fuhrman 647-5033
Dec. 4	<u>BALTIMORE</u>	Sandy Point and Kent Island for winter residents. Leader: Mr. Stephen Simon, 944-3145. Meet Farmers' Market, Ritchie Highway (Route 2) at Beltway, 7:30 a.m.
Dec. 8	<u>TALBOT</u>	Audubon Screen Tour. John T. Bulger. "New England Saga", 8 p.m., Mt. Pleasant School.
Dec. 10	<u>CAROLINE</u>	Monthly meeting
Dec. 12	<u>BALTIMORE</u>	Brigantine National Wildlife Refuge near Atlantic City, N. J. for winter residents. Leaders: Mr. & Mrs. Malcolm Thomas VA3-1132 Meet 7:30 a.m., Korvette parking area.
Dec. 21 - Jan. 2	<u>CHRISTMAS BIRD COUNTS</u>	- To be announced.
Jan. 7, 1966	<u>ANNE ARUNDEL</u>	"Maryland Conservation Now". lecture by Mr. Roger Norden. 8 p.m. State Office Bldg.
Jan. 8	<u>BALTIMORE</u>	Sandy Point and Prof. & Mrs. Howard's Bird Sanctuary in Annapolis. Leader: Mrs. Robert E. Kaestner, DR7-8990. Meet Farmers' Market, Ritchie Highway 8:15 a.m. Snow postponement date, Jan. 15th.

Jan. 14	<u>BALTIMORE</u>	Monthly meeting. Film: "Nature's Birds of Prey" 8 p.m., Enoch Pratt Library
Jan. 23	<u>BALTIMORE</u>	Covered dish supper at Cylburn Mansion 6 p.m. Reservations with chairman, Mrs. Carl Francis NO5-3943
Jan. 25	<u>PATUXENT</u>	Monthly meeting 7:45 p.m.
Jan. 26	<u>ALLEGANY</u>	Monthly meeting 7:30 p.m. Speaker: Mr. Edgar Reynolds

CONTENTS, SEPTEMBER 1965

Report of State-wide Bird Count, May 1, 1965	Vernon M. Kleen	59
Orange-crowned Warbler in Montgomery County in Spring	R. L. Smith and D. R. Wones	70
Migrating Waterfowl at Seneca	Robert W. Warfield	70
Fifty Thousand Birds Recorded on Breeding Bird Survey	Chandler S. Robbins	73
The President's Page	V. Edwin Unger	80
The Season -- April, May, June, 1965	Chandler S. Robbins	81
Exhibit of American Bird Carvings		89
Nature Camp at Carey Run	B. Taylor and M. Garland	90
Baltimore Junior Program 1965-66		91
Announcements		92

MARYLAND BIRDLIFE

Published Quarterly by the Maryland Ornithological Society, Inc.
to Record and Encourage and Study the Birds of Maryland

Editor: Chandler S. Robbins, Patuxent Research Center, Laurel
Asst. Editor: Mel Garland, 36 Burke Ave., Towson, Md. 21204
Editorial Board: C. Douglas Hackman, Vernon Kleen, Mrs. C. Gordon Taylor
Production: Carole B. Cannon, William S. Clark, Gladys H. Cole, Mildred F. Cole, Anderson Martin, Ted Van Velzen.



Hastings-Miramar

Ocean City, Maryland

On the Boardwalk — Open All Year

90 ROOMS, 60 WITH BATH

EXCELLENT MEALS 30 BEAUTIFUL APARTMENTS

PHONE: OCEAN CITY:
ATLANTIC 9-7417

PARKING SPACE

SPECIAL RATES FOR BIRDERS